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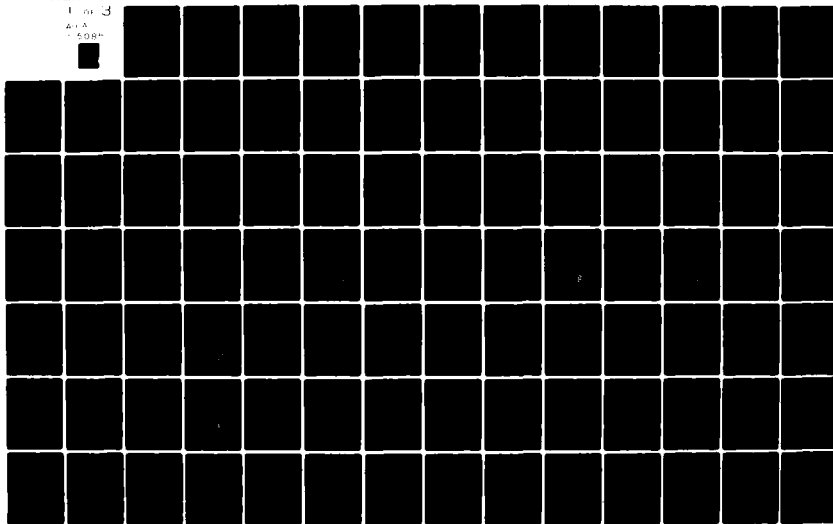
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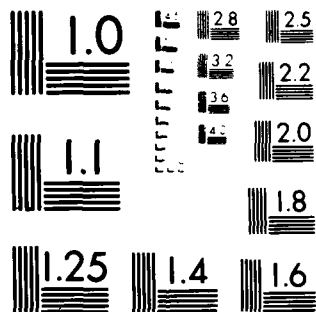
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FINAL REPORT

EVALUATION OF LEARNING STRATEGIES
TRAINING PROGRAM

94B10

Fort Lee, Virginia

The views, opinions, and/or findings contained in this report are those of the authors and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other documentation.

Delivery Order 0090

Submitted by

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30 November 1981

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The primary purpose of the learning strategies evaluation was to provide a statistical verification of the ICI learning strategies training program to make a determination of its possible applicability to a wider base of Army training. It was designed to demonstrate that entry-level student cooks can learn fundamental cooking skills more proficiently than student cooks receiving conventional self-paced training. The views, opinions, and/or findings contained in this report are those of the authors and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other documentation.		

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Qualifying Note:

→ Report addresses a prototype test of commercial curriculum, curriculum development, delivery and modification techniques applied under less than favorable, fully controlled evaluation circumstances in order to ascertain if immediate, large scale developmental tests should be undertaken in light of potential program costs. Additionally, early anecdotal insights concerning tested program adaptability in a military delivery context were to be acquired. Conclusions drawn in these circumstances and reported herewith should not be concluded as a fair appraisal of the curriculum and are indeed tendencious.

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EVALUATION OF LEARNING STRATEGIES
TRAINING PROGRAM

94B10
Fort Lee, Virginia

FINAL REPORT

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EXECUTIVE SUMMARY

This report concerns the evaluation of a learning strategies effort designed to demonstrate that entry-level student cooks could learn fundamental cooking skills more proficiently than student cooks receiving conventional self-paced training used at Fort Lee. Beginning in April 1981 selected personnel of the Subsistence and Food Service Department, United States Army Quartermaster School, Fort Lee, Virginia received training in learning strategies from the Institute for Curriculum and Instruction. Subsequently these personnel implemented the learning strategies into their presentation of the content of the initial phase of the course for 94B10.

During the period July - September 1981 over fifty students in 94B10 received training incorporating learning strategies. Concurrently a comparable group of students received conventional self-paced training. External evaluators were asked to gather and analyze data on the performance of each group. Both groups were evaluated along several dimensions: 1) quality of food items prepared; 2) adherence to prescribed procedures; 3) indicators of their confidence/attitude when performing tasks; 4) proficiency in cooking skills; 5) knowledge of garrison equipment; and 6) ability to convert recipes to various troop size requirements.

The data gathered on students receiving learning-strategy based training and conventional self-paced training were analyzed according to procedures and standards typically used to determine the impact of training innovations. No statistically significant differences were found between the groups in food item quality, cooking skills, or recipe conversion. Students receiving learning-strategy based training showed statistically higher scores on adherence to procedures, confidence, and knowledge of garrison equipment. TRADOC must decide if these statistical differences have practical significance for adopting a learning-strategies approach to training. In addition, an effort should be made to determine if results in some areas could be accounted for by deficiencies in conventional self-paced training materials used at Fort Lee rather than the superiority of learning-strategies based training.

Part I

OVERVIEW LEARNING STRATEGIES PROJECT EVALUATION

Background

The Armed Forces continue to face difficulties in preparing and maintaining troops at an adequate level of readiness. This is due in part to the restricted learning ability of those currently volunteering for military service. At a time when weapons and support systems are becoming increasingly complex, recruits are entering military training less and less prepared to acquire the necessary knowledge, skills, and abilities.

As part of an overall effort to provide trainees with basic skills, learning strategies are being considered as a means of upgrading trainee performance. Learning strategies, broadly defined, are designed to help a student become a better learner while learning. In other words, learning strategies promote skill building for students in the general process of learning at the same time they are learning content in a specific course of instruction. Student self-awareness as a learner is a key factor.

Classroom instructors are often the means by which learning strategies are conveyed to students. They develop lesson plans around learning strategy principles which focus student attention on learning as it is taking place. A heavy emphasis is placed on the use of questions which force a student to analyze his or her learning activities. The goal is for this instructor-induced awareness to be internalized

by students and become a permanent part of their learning repertoire.

Learning Strategies Experiment

TRADOC and the Quartermaster School, Fort Lee, contracted with the Institute for Curriculum and Instruction (ICI) for a demonstration project in learning strategies. The project called for training QMS instructors from the Subsistence and Food Service Department to implement ICI's approach to learning strategies in the initial phases of the course for 94B10. The contract called for each instructor to receive fifteen days of training from ICI. The training was provided in April-July 1981. Subsequently, the instructors incorporated learning strategies into their presentation of selected skills in 94B10.

The utilization of a learning-strategies approach was expected to have a significant impact in a number of areas. Students receiving training from instructors trained by ICI were expected to outperform their counterparts receiving the more conventionally-used self-paced training at Fort Lee in six areas of small quantity cooking, baking, and garrison equipment:

1. Quality of food items prepared.
2. Adherence to prescribed procedures.
3. Confidence in performing tasks.
4. Proficiency in cooking skills.
5. Knowledge of garrison equipment.
6. Ability in recipe conversion.

TRADOC, QMS, and ICI agreed that the project evaluation would be based on the significant differences, if any, between the performance of students trained from lesson plans which incorporated the use of

ICI's strategies and students trained from plans and methods used in the current program.

Project Evaluation

In order to objectively assess the impact of ICI's work with QMS instructors, two external evaluators were sought to examine the performance of students receiving learning-strategies based training. The individuals were required to be "thoroughly familiar with state-of-the-art evaluation and evaluation techniques . . . (and with) experience both in the theory and application of statistics and in working with the Army." Based on these requirements, Dr. C. Edward Cavert and Dr. John A. Shtogren were asked to conduct the project evaluation.

The primary objective of the evaluation was to provide a statistical verification of the ICI learning strategies training program so a determination could be made of its possible applicability to a wider base of Army training. It was anticipated that the evaluators would be engaged in five specific tasks while accomplishing the primary objective. They were asked to:

1. Develop a set of evaluation instruments for collecting data on the performance of students who have received ICI learning strategies training as part of their curriculum in the 94B10 course.
2. Administer the instruments to trainees, on-site, as part of their performance testing within the 94B10 course.
3. Compile all relevant data on designated experimental groups of trainees and all designated control groups of trainees.

4. Provide a final report on the total evaluation results of the ICI learning strategies training program as evidenced by student performance on tasks within the 94B10 curriculum.

5. Compare evaluation results of 94B10 with similar data from Fort Jackson, South Carolina and Homestead AFB, Florida.

The following sections of this report provide detailed information on how these tasks were accomplished. The second section describes the activities related to data collection. Supporting documentation for these activities is contained in Appendix A. The third and fourth sections present the results of student performance and conclusions derived from these data. The tabulated data from which the conclusions were drawn are contained in Appendix B.

Part II

EVALUATION ACTIVITIES

Design and Procedures

The evaluators joined the Learning Strategies Experiment at a point when TRADOC, QMS, and ICI had reached mutual agreement on an evaluation design and related procedures. All parties, however, were open to modify these plans based on the evaluators' review. After an in-depth review of the plan, the evaluators agreed on its essential soundness. Key features of the plan included the following:

1. Students entering training at the same time would be randomly assigned to two groups: an experimental group receiving learning strategies training (ICI Group) and a control group receiving the more conventionally used self-paced training at Fort Lee (Self-Paced Group).
2. Data would be collected on student performance, student reaction to training, and their perceptions of their own proficiency.
3. QMS personnel from outside the experiment (not the evaluators) would serve as raters to collect data on student performance because of the expertise required to assess culinary skills and abilities.
4. The evaluators would insure that QMS personnel would use the same criteria and standards when assessing results, procedures,

and confidence/attitude indicators relating to food items, skills, equipment, and recipe conversion.

5. Data on instructor reaction to training students in learning strategies would be collected.

Data collection would take place over a five-day period. Students in two different cycles of training would be assessed. Thirty or more students trained with learning strategies methods and a similar group of students trained by conventional methods would be assessed. (For additional information on the initial evaluation design and procedures see pages A1-A6 in Appendix A.)

Rater Orientation

Prior to the actual data collection the evaluators met with QMS raters to familiarize them with the criteria and forms to be used during the evaluation. The raters conducted trial runs on students from outside either test group who had recently completed training in a 94B10 course. They assessed them in each of the areas of concern to the experiment. Subsequently, the raters and the project evaluators discussed the ratings of each individual rater, and how they were derived. By the end of this orientation the Chief of the Culinary Skills Division confirmed that the raters had reached a level of inter-rater reliability comparable to those who judge culinary contests throughout the Armed Forces.

Data Collection

The data were collected in two phases. In Phase I students were assessed in small quantity cooking, small quantity baking, and cooking

skills. Assessment was made of the quality of food items, adherence to procedures, level of confidence, and general cooking ability. Data in these areas were collected during a three-day period. In Phase II, students were assessed in the inspection, operation, and cleaning of garrison equipment, recipe conversion, and their reaction to training and perceptions of their own skills. Data in these areas were collected during a two-day period a week following Phase I of the evaluation.

Data were collected from two complete cycles of training to involve a sufficient number of students to make valid statistical comparisons between experimental (ICI) and control (Self-Paced) groups. As described below, the same activities were conducted during both cycles of training.

Phase I -- Day 1

Two laboratories were outfitted to accommodate students in the experimental (ICI) and control (Self-Paced) groups. Students were assigned identification numbers and interspersed at work stations so that the raters would not know to which group they belonged. The students were informed that they would be preparing a variety of food items which would be judged but the ratings would not affect their progress in the course. (See page A-8, Appendix A for directions given to students.)

Two raters were assigned to each laboratory and were given responsibility for assessing the performance of one-half the students. Each rater asked students a series of questions designed to test knowledge of proper methods. As each student prepared a salad, soup,

vegetable, and main dish, the raters observed how they met these 11 criteria on procedures:

1. Washed hands.
2. Read complete recipe.
3. Checked equipment to be used.
4. Assembled all needed utensils.
5. Assembled all needed ingredients.
6. Followed the recipe procedures, step by step.
7. Used proper procedures to maintain sanitation and safety.
8. Prepared food item without waste.
9. Performed each cooking skill properly.
10. Used "clean as you go" procedures.
11. Cleaned self/utensils/work area after completion of the task.

The raters used a scale of 0-4 to rate each listed criterion: 0 indicated the student did not do (NOGO); 1 indicated the student did but not minimally acceptable (NOGO); 2 indicated done at minimum acceptable level of performance (MALP); 3 indicated done above MALP but not to desired level of performance (DLP); and 4 indicated done at DLP for given conditions. (Rating scale used and questions asked are on page A-9 and A-10, Appendix A.)

At the same time the raters observed indicators of the student's confidence/attitude according to these 5 criteria:

1. Proceeded with the task without false starts or trial/error activity.
2. Attended to own actions and did not look to others for help or guidance.
3. Stayed focused on the task and did not create or participate in irrelevant conversation or activity.

4. When difficulties arose, remained "cool under fire" and took actions to overcome them.
5. Showed concern for quality by checking results of actions as he/she progressed through the preparation tasks.

Raters used a scale of 0-4 to rate each criterion: 0 indicated the student did not do (NOGO); 1 indicated done, but not minimally acceptable (NOGO); 2 indicated done at minimum acceptable level of performance (MALP); 3 indicated done above MALP but not to desired level of performance (DLP); and 4 indicated done at DLP for given conditions. (Rating scale used is on page A-11, Appendix A.)

When a student completed a food item, it was placed on a separate judging table. Each item prepared was rated for these criteria: taste/ flavor, appearance, texture/consistency, and garnish when appropriate. The same 0-4 rating scale used to evaluate procedures and confidence was applied to each criterion in judging the completed food item. To insure rater objectivity and equity, food items were identified by student number and only two of each student's four food items were judged by each rater. The evaluators monitored these procedures. (For further information on the specific food items prepared, and the criteria used to judge, see pages A13-A28, Appendix A.)

Phase I --Day 2

The second day focused on small quantity baking. Again, students were rated on procedures, confidence/attitude indicators, and completed food items with the only major change being the menu itself. (See pages

A29-A39 for the small quantity baking menu items and the criteria used to judge them.) The raters, however, exchanged laboratories to minimize the possibility of bias. Thus, each student had different food items judged by each of the four raters and was judged on procedures and confidence by two raters during the first two days of evaluation.

Phase I -- Day 3

The third day was devoted to assessing cooking skills. Each student was required to demonstrate his or her proficiency in using a knife to shred, dice, slice, and cut. Each was also assessed in the skills required to prepare a brown roux. Each rater judged the performance of two students simultaneously, using these criteria:

1. Finely shredded fresh cabbage.
2. Diced fresh sweet pepper (1/2 inch).
3. Sliced fresh pared cucumber (1/8 inch).
4. Cutting tomato wedges (8).
5. Making a brown roux.

Raters used a scale of 0-4 to rate each listed criterion: 0 indicated the student did not do (NOGO); 1 indicated it was done but not minimally acceptable (NOGO); 2 indicated it was done but only minimally acceptable (MALP); 3 indicated it was done above MALP; and 4 indicated it was done at desired level for given conditions (DLP). (For further information on directions to students and cooking skills criteria, standards, and rating sheets, see pages A41-A52, Appendix A.)

Between the two phases of evaluation, both the experimental (ICI) and control (Self-Paced) groups received training in garrison equipment and recipe conversion.

Phase II -- Day 1

At the beginning of the first day of Phase II all students were given a 40-minute written problem to test their ability to convert recipes to smaller or larger amounts of ingredients than given on recipe cards. Their tests were graded by the raters at the end of the day. (For further information on directions to students, worksheets, tasks, and test criteria and standards for recipe conversion see pages A53-A60, Appendix A.)

The remainder of the day was used to test student knowledge of garrison equipment. Each of four raters was assigned to a different piece of equipment and rated individual students for knowledge of how to inspect, operate, and clean the equipment. Each rater used a standard list of questions to elicit responses from trainees (see Appendix A, page A-63). By the end of the day, each student had been rated on one piece of equipment against these 15 criteria:

1. Checked equipment before starting to operate it.
2. Explained purpose for checking.
3. Observed all necessary safety precautions before operating.
4. Explained importance of safety precautions.
5. Took the proper actions to start the equipment.
6. Took the proper actions to operate the equipment.
7. Explained starting and operating procedures.
8. Took the proper actions to stop the operation.
9. Explained procedure for stopping the operation.

10. Took proper actions to disassemble equipment for cleaning.
11. Explained disassembling procedure.
12. Took proper actions to clean equipment.
13. Explained cleaning procedure.
14. Took proper actions to assemble equipment.
15. Explained assembling procedure.

Raters used a scale of 0-4 to rate each criterion: 0 indicated the student did not do (NOGO); 1 indicated done but not minimally acceptable (NOGO); 2 indicated done at minimum acceptable level of performance (MALP); 3 indicated done above MALP but not to desired level (DLP); and 4 indicated done at DLP for given conditions. (For further information on directions to students, equipment descriptions, question sequence, criteria and standards, see pages A61-A96, Appendix A.)

Phase II -- Day 2

The second day of Phase II was used for the most part to gather more information on student performance with garrison equipment. Four different pieces of equipment were used the second day to test students using the same methods and criteria used the previous day. By the end of the day, each student had been rated on a second piece of equipment.

Also collected were student reactions on the training they had received in the 94B10 course to date, and how each student perceived his/her own proficiency as a result of that training. A written survey was used to gather their views in the 16 areas of task competency and 13 aspects of training. Task competency ratings would allow for comparisons to be made of self-perceptions of proficiency between experimental (ICI) and control (Self-Paced) groups and between student self-

perceptions and those of the raters. Aspects of training ratings would allow for comparisons to be made between groups on a variety of factors which may affect subsequent student performance. (See pages A97-A100 in Appendix A for the survey.)

Since neither the raters nor the evaluators had any official contact with the instructors for the ICI group or those for the Self-Paced group, Instructor Reaction Surveys were to be administered by supervisory personnel of the Subsistence and Food Service Department, and given to the evaluators for tabulation and analysis. (See pages A101-A104 for the Instructors' Reaction Survey.)

Part III

RESULTS

The data collected during the evaluation following the design and procedures are presented in Appendix B. Tabulations of these data are presented in three sections: first, combined tabulations for both cycles of the evaluation; second, for those troops entering training 15 July 1981 as Cycle 1; and third, for troops starting training 19 August 1981 as Cycle 2. Data are presented in detail in Appendix B so that the results reported in this section can be verified and additional hypotheses of interest, which are beyond the scope of this study, can be tested.

Data are tabulated in Appendix B to show: 1) the distribution of students in each group who were rated at the desired level of performance (DLP), at or above the minimum acceptable level of performance (MALP), or those who were rated below the MALP and who were given NOGO; 2) the frequency of scores of each group on the 0-4 rating scale used in evaluation; and 3) the average scores on each measure taken. Data are tabulated to show ratings for items, tasks, and criteria. Further study of these data could reveal individual strengths or weaknesses in either group in specific skills required to prepare different food items, perform different tasks, or work with different pieces of equipment.

There were nine questions of primary interest pursued in the data analysis concerning students receiving the two types of training: that using ICI learning strategies in the experimental group; and self-paced instruction, more conventionally used in training for this MOS at Fort Lee.

Was student performance in the experimental (ICI) group and in the control (Self-Paced) groups:

1. Similar in demographic characteristics and aptitude?
2. Different in the quality of food items they prepared?
3. Different in the ability to follow procedures?
4. Different in the indicators of confidence/attitude they displayed?
5. Different in proficiency in cooking skills?
6. Different in ability to convert recipes?
7. Different in knowledge of garrison equipment?
8. Different in their self-perceptions of task competency?
9. Different in their views of the training received?

Statistically valid answers to these questions can provide a reasonable basis for assessing the impact of learning strategies-based training and used in review and decision making by TRADOC, QMS, and ICI.

Student Characteristics

In order for valid comparisons to be made between training types, the students in both the experimental (ICI) and control (Self-Paced) groups had to be sufficiently similar to insure that variance in individual characteristics did not influence the results. A table of random numbers was used to assign students to each group for training and further analysis was conducted to verify this procedure did indeed insure similarities between groups.

The groups in each cycle were compared in terms of age, educational level, and the 12 scores on aptitude battery tests. A T-test was used to determine differences at the .05 level of probability. In other

words, for a difference to be considered statistically significant it could only occur by chance 5 times out of 100.

Overall, the results indicated no significant difference between the student characteristics of the experimental (ICI) and control (Self-Paced) groups.

Only one of the twenty-four measures, the Skills Technical (ST) scores for students in Cycle 1 indicated a significant difference. There the average scores were 89.9 for the experimental group and 97.1 for the control group. Given the number of measures taken at the .05 level of probability this variation is not surprising. The experimental and control groups, therefore, for both cycles were seen to be sufficiently similar for evaluative purposes. (Data on student characteristics are found in Appendix B, pages 10, 56-57, and 94-95.)

Food Items--Small Quantity Cooking and Baking

The first measure of student performance was the quality of food items prepared by students in the experimental (ICI) and control (Self-Paced) groups. A multi-variate analysis of variance was used to determine significant differences within each cycle and for data combined from both cycles. The .05 level of probability was again used as a standard of significance.

The results indicated no significant differences between the quality of the food items prepared by the experimental and control groups.

This result was true for the quality of food items for each cycle and for both cycles combined. (Data on food item ratings are

in Appendix B on pages 6, 24-25, 62-63, and 100-101.)

Procedures

The second measure of student performance was the degree to which the students in each group followed prescribed procedures while preparing food items. A multi-variate analysis of variance was used to assess differences at the .05 level of probability for significance.

Overall, students in the experimental group showed a higher level of adherence to procedures than those in the control group.

The combined ratings for the experimental groups in each cycle show a 2.6 mean score and 64.2% of possible compared to the control groups' 2.4 mean score and 60.4% of possible. It should be noted that the procedure scores from Cycle 1 accounted for this difference. (2.7 and 68.6% versus 2.5 and 63.1%) These scores were sufficiently different to outweigh the fact that no statistically significant differences in procedure ratings were evident in Cycle 2 (2.4 and 59.6% versus 2.3 and 57.7%). (Data on procedure ratings are found in Appendix B on pages 34, 64, and 102.)

Confidence/Attitude Indicators

The third measure of student performance was the level of confidence displayed by students in each group. A multi-variate analysis of variance was used to assess significant differences at the .05 level of probability.

Overall, students in the experimental group showed a significantly higher level of confidence than those in the control group.

The combined ratings for the ICI experimental groups in each cycle show a 2.8 mean score and a 70.3% of possible compared to the Self-Paced control groups' 2.5 mean score and 63.4% of possible. As with the previous measure, confidence scores from Cycle 1 accounted for this difference (2.9 and 72.7% versus 2.6 and 65.3%). Cycle 1 scores were sufficiently different to outweigh the fact that no statistically significant difference in the level of confidence between the two groups was found in Cycle 2 (2.7 and 67.7% versus 2.5 and 62.9%). (Data on confidence/attitude indicator ratings are in Appendix B, pages 35, 65, and 103.)

Cooking Skills

The fourth measure of student performance was the level of cooking skills demonstrated by students in each group. Again, a multi-variate analysis of variance was used to assess significant differences at the .05 level of probability.

The results indicated no significant difference between the level of cooking skills demonstrated by students in each group.

This lack of significant difference in skills performance was apparent in each cycle and when both cycles were combined. (Data on cooking skills ratings are in Appendix B, pages 36, 65, and 103.)

Recipe Conversion

The fourth measure of student performance was the students' ability to convert recipe ingredients as required by troop size. It should be noted that scores were so uniformly poor in this area that the original

standards had to be abandoned to provide a measurable amount of data. A T-test was used to ascertain significant differences at the .05 level of probability.

The results indicated no significant difference in the ability to convert recipes between the experimental and control groups.

No significant differences were found in either cycle or when the data from each cycle were combined. (Data on recipe conversion scores are in Appendix B, pages 30, 88, and 126.)

Garrison Equipment

The fifth and final measure of student performance was the level of knowledge about the function and operation of a variety of pieces of garrison equipment. An attempt to discriminate significant differences between the experimental (ICI) and control (Self-Paced) groups was done using a T-test at the .05 level of probability.

Overall, students in the experimental group showed a significantly higher level of knowledge of garrison equipment than those in the control group.

Combined scores as well as scores in each cycle indicated a superior knowledge of garrison equipment on the part of the students receiving learning strategies-based training. (Data on garrison equipment ratings are in Appendix B, pages 37-39, 84-87, and 122-125.)

Student Reactions--Task Competency

The sixth measure was not one of student performance but one of the student's opinion of his or her ability to perform. It can be

viewed as a measure of the student's opinion of how well the training received to date had prepared him or her to function in a cooking facility. A comparison of student reactions was made by analyzing the proportion of superior mean scores for each group on each of forty-five items and calculating, at the .05 level, the probability that the proportion could be found by chance if the groups were in fact the same. This technique helps avoid the situation where a few items with exceptionally high or low scores skew the results.

Overall, the results indicated no significant difference between each group's self-perception of task competency.

Students in the experimental (ICI) group in Cycle 1 scored significantly higher (2.6 versus 2.2) than students in the control (Self-Paced) group but Cycle 2 scores (2.5 versus 2.4) dissipated the initial significant differences. (Data on student reactions to task competencies are in Appendix A, pages 42-43, 90, and 128.)

Student Reactions--Training Program

The seventh measure was the student's rating of various aspects of training. They were not asked to make value judgments about its quality or to indicate their satisfaction, only to indicate the frequency of occurrence of various events. Ten of the thirteen aspects rated by students could be used to make unbiased comparisons between the two types of training (ICI and Self-Paced). As in the student reaction to task competencies, the proportion of superior mean scores in each group was analyzed as to the probability of it occurring in groups which were in fact similar.

The results indicated no significant difference between each group's view of the training received.

No differences were found within combined data or in each cycle. (Data on the students reaction to the training are in Appendix B, pages 44-45, 91, and 129.)

Instructor Reaction Surveys

No data from reactions surveys completed by instructors of both the ICI and the Self-Paced group in either cycle were given to the evaluators to analyze.

Comparison with Other Experiments

Similar experiments in the use of learning strategies-based training programs were being conducted at Fort Dix, Fort Jackson, and Homestead Air Force Base. At the time of the completion of this report there was not sufficient data available from any of these other locations to permit comparisons to be made.

Summary

The statistical analyses of student performance between the experimental group receiving learning strategies-based training and the control groups receiving the more conventionally-used self-paced training at Fort Lee indicated superior performance by the experimental group in three of six areas -- adherence to procedures, level of confidence, and knowledge of garrison equipment. No significant differences were found in the quality of food items, cooking skills, and recipe conversion.

By the students own report they did not view their task competency or the training received significantly different in either group. It should be noted that much of the superior performance shown by the experimental group in the three areas was done in Cycle 1. This higher level of performance demonstrated by students who were the first to receive learning strategies-based training was corroborated by the differences in perceptions of task competency between Cycle 1 and Cycle 2 experimental groups.

PART IV CONCLUSIONS

The focus of the final section of this report is on the evaluators' conclusions rather than recommendations. Even with data on student performance, the evaluators are not in a position to definitively advise TRADOC on the continuation or discontinuation of learning strategies-based training. To do so would require additional data from a cost-benefit perspective--the costs of training instructors and whether or not there will be any long term positive impact on field performance or morale for those students whose performance was rated higher in certain areas.

Even with their limited perspective, however, the evaluators must raise several issues that contribute to a substantial reservation about the continuation of learning strategy-based training as conducted at the Quartermaster School, Fort Lee, Virginia. Again, this is not to question the overall concept of learning strategies, but the value of this approach as a training innovation used during the first two weeks of training as done in 94B10.

Statistical and Practical Differences

As described in the previous section, the experimental group (trained by instructors using learning strategies techniques) were rated significantly higher than the control group (receiving the conventional self-paced instruction at Fort Lee) in three of six areas: procedures, confidence, and knowledge of garrison equipment. Although there was a statistically significant superiority in each area,

procedures and confidence ratings were higher by four percent and seven percent respectively. The question that TRADOC must address here is whether or not the cost of the training innovation has a practical value. In the eyes of the evaluators, the difference in scores in these two areas appears to have little practical significance.

It should also be pointed out that the proportion of students in either group receiving NOGO on performance, or ratings just at the minimum acceptable level was almost alarming. The highest ratings achieved at the desired level of performance was 32.3% of the students in the experimental (ICI) group from Cycle 1, with the mode score closer to five percent. (See Appendix B, pages B14-B18.) One can conclude that the training program for either group may well be inadequate at this stage of the course to prepare soldiers to perform in the field.

Experimental Superiority or Conventional Shortcomings

The area of greatest superiority was shown by the experimental (ICI) group in their knowledge of garrison equipment. Their ratings were over twenty percent higher than the control (Self-Paced) group's ratings. There is some question whether this result should be attributed to the strengths of the learning strategies training or to weaknesses of self-paced training. The experimental group's training required them to be conversant with the equipment--they practiced fielding questions from their instructors and describing each piece of equipment to each other. Control group students passively watched video tapes on the same topics, frequently under strict military discipline. Thus, it would be expected that students in the experimental group would be more adept at answering questions when confronted by the raters.

Hawthorne Effect

As noted in the previous section, the experimental group's superiority in procedures and confidence was largely a function of the performance of the students in the first cycle. This superiority of first cycle learning-strategies-trained students was also reflected in their self-perceptions of task competencies.

At issue here is whether the superior performance of the experimental group in procedures and confidence was a function of the particular kind of training they received or simply that they were being treated differently. It appears that the special attention given to the experimental group may have been a significant causal factor. It should be noted that ICI staff were present and visible during Cycle 1 training only. The personal attention ICI gave directly to QMS instructors and indirectly to experimental group students may have been a substantial motivating force; a force that was not sustained in their absence during Cycle 2.

Summary

Students in learning strategies-based training showed statistically superior performance in three of the six areas considered important by all parties. In the evaluators opinion, even these differences do not indicate conclusively the superiority of the innovation for the following reasons: 1) mathematical differences in procedures and confidence are relatively minor in practical terms; 2) superior performance in garrison equipment may be accounted for by the fact that self-paced training did not minimally prepare control group students to

perform during evaluation; and 3) differences between Cycle 1 and Cycle 2 experimental group student performance casts doubt on whether superiority in any area can be maintained without ICI's direct intervention. Based on these observations, the evaluators have serious reservations about the value of learning-strategies based training as assessed in 94B10 at the Quartermaster School at Fort Lee, Virginia.

Evaluation
Learning Strategies Training Program
94B10
Fort Lee Virginia

APPENDIX A
EVALUATION DESIGN AND PROCEDURES

EVALUATION DESIGN FOR ADVANCED INDIVIDUAL TRAINING 94B10 TEST

1. Evaluation/Rating Procedures.

a. Two types of data need to be corrected based on:

- (1) Student performance/knowledge/reactions.
- (2) Instructor reaction/knowledge of learning

b. Students. The following data needs to be collected:

- (1) Performance of four types of confirmation tasks:
 - (a) Food items.
 - (b) Skills
 - (c) Recipe conversion.
 - (d) Equipment.

Each to be evaluated against:

- (e) Results.
- (f) Procedures.
- (g) Confidence indicators.

(2) Reaction to training survey: To be completed by all students at end of the test.

(3) How this data will be collected:

- (a) When: Small Q/Bakery/Cooking Skills--July 29/30/31
Garrison Testing - Aug 6/7
- (b) Second cycle: Course commences 6 Aug 81
Small Q/Bakery - Aug 19/20/21
Garrison Testing - Aug 27/28
- (c) Where: Bldg T-11531 for Small Q/Baking
Garrison Testing, P-9303

Plan that control group will also train in P-9303

(d) By whom: Recommend one NCO from DOES and those from Subs & Fd Svc Dept as follows:

- 1. MSG Hannon
- 2. SFC Moore
- 3. SFC Posser
- 4. SSG Oloman

(e) Requirement: Raters need to assemble for at least 2 days prior to 29 July 81 for purposes of analyzing the confirmation tasks and the confirmation task rating sheets.

2. Focus of Orientation for Raters:

a. Analysis of confirmation tasks: Familiarization with criteria and procedure charts including a trial run of items to be tested using Rater Reference Sheets on characteristics of food items for practice.

b. How to use the rating sheets: To include the procedure charts showing rater reference skills for the third day of testing Small Q/Baking techniques.

c. By what method will the information be gathered?

(1) Small Q/Baking: Confirmation tasks RESULTS/PROCEDURES/CONFIDENCE INDICATORS.

(a) Issue 1: Results of the task will be observed and rated according to criterion rating sheet.

(b) Issue 2: Procedures and confidence indicators will be observed while students prepare items. Each appropriate skill to be rated in accordance with criterion rating sheet. Students will be randomly selected within their groups and positioned at stations which make it possible for the raters to observe the ten procedures without knowledge of the test/control student identification.

(2) Small Q/Baking skills evaluation: The aim is to observe and evaluate the particular cooking skills performance currently taught in the 94B10 POI.

(a) On day 3, there will be 6 hrs to test. Plan to allow 1 hour per student, that is 45 minutes for actual performance and 15 minutes for rating consolidation. This will allow for 12 students to be selected for evaluation from each group.

(b) Each student will be tested in three skills. part of this evaluation will be a test of knowledge during performance. Skills will be selected against the following criterion:

1. Most important
2. Most critical
3. Length of time

(c) Assessment will be conducted by Raters using criterion rating sheet for knowledge and performance.

3. Evaluation of Recipe Conversion Phase.

Each student will be given two recipes to convert. Results and worksheets will be rated in accordance with criterion rating sheets.

4. Evaluation of Garrison Equipment Phase.

a. Students will be evaluated and rated on confirmation tasks which involve:

- (1) Inspection
- (2) Operation
- (3) Cleaning

Of two items of equipment selected from the 10 trained by the project evaluator.

b. The raters will observe what students do and the way they do it and rate their performance, using a criterion check list.

c. Raters will also interview students during the performance to obtain information about their knowledge of the equipment based on the following system:

		R	R	R	R
Control 1-16	1C1 1-16	Equ	Equ	Equ	Equ
		1-5-9-13	2-6-10-14	3-7-11-15	4-8-12-16

d. Equipments will alternate the next day so that eight out of 10 are evaluated.

e. Sixteen students will be selected by some criterion from each group to participate in the evaluation.

5. Logistic Requirements.

a. MSG Anderson will be responsible for the procurement of all food items and equipment items to conduct the test in Bldg T-11531 and P-9303. He may be assisted by MSG Rhea as necessary.

b. All items of equipment in the Garrison phase will need to be assessed for criterion for evaluation.

6. Student Reaction Survey.

a. A written student reaction survey will be administered by the project evaluator during the garrison equipment test phase which will provide information on student scan of confidence, preparedness and thoughts about the training process, etc.

7. Instructor Participation.

a. Data to be collected will include:

- (1) Reactions to training students and their role as instructors.
- (2) Administering of a knowledge survey of their understanding of training and learning.

b. Survey to be made at conclusion of the test.

8. Small Q/Baking Phase Test Items. To include the following items on Day 1.

a. Salad Item.

- (1) Potato Salad - M40
- (2) Waldorf Salad - M50

b. Soup Item:

- (1) Vegetable Soup. P-7
- (2) Chicken Vegetable (Mulligatawny) Soup P-20

c. Main Dish:

- (1) Baked Macaroni and Cheese - F1 (2)
- (2) Chicken Fried Steak - L12

d. Vegetable Item

- (1) Cauliflower au gratin - Q18
- (2) French Fried Onions - Q35 (2)

e. Each student will prepare four items to be selected by the project evaluator in accordance with skills to be demonstrated.

f. Suggested breakdown of items as follows:

Potato Salad	Waldorf Salad
Vegetable Soup	Mulligatawny Soup
Baked Macaroni & Cheese	Chicken Fried Steak
French Fried Onions	Cauliflower au gratin

g. Each group will each prepare an even split of menus.

9. The following items will be included in the Pastry Evaluation on Day 2.

- a. Cheese Biscuits D1 (2) (3)
- b. Blueberry Muffin D30 (1+2)
- c. Chocolate Cake G9 (1+2)
- Butter Cream Frosting G39(2)
- d. French Toast D-22
- or Western Omelette F8 (10)

Items at a, b, & c will be prepared by all students. Items at d will be prepared by half the students in each group.



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Major, ACC
C, Culinary Skills Div

6 July 1981

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

PROCEDURES FOR EVALUATING CONFIRMATION TASKS

Day 1--First Cycle - 29 July 1981Small Quantity Cooking:

1. Maximum 40 students to be evaluated in two kitchen classroom (Labs) in T-11531. Determination to be made as to whether two adjoining kitchens are available. If not, then maximum 20 students to be tested, using random selection of 10 students from each group.

2. Food items to be prepared have been established. Twenty or ten students will each prepare the following group of items. They will be alternately placed in the kitchen.

Potato Salad

Waldorf Salad

Vegetable Soup

Mulligatawny Soup

Baked Macaroni Cheese

Chicken Fried Steak

French Fried Onions

Cauliflower au Gratin

3. Each food item will be evaluated and rated on completion by one of four raters using the confirmation task rating sheet (food items) together with the Rater's Reference Sheets.

4. A row of tables will be set up down the center of each Lab. Students will be identified by a number system which they will wear on their shirts. The corresponding number will be placed on the table.

5. A folder containing four confirmation sheets (one for each item) will be placed at each number of the table.

6. Each of four raters will evaluate one food product for each student during the test. This means that each student will have been rated once by each rater at the conclusion of the test.

7. Additionally the raters will be evaluating procedure, confidence, and attitude indicators, using the confirmation task rating sheets for two students at a time from start to finish of a single product.

8. In this way, all students should have been evaluated at least once during the test.

9. Raters will have the rating sheets with them on clip boards during this evaluation.

Day 2--First Cycle - 30 July 1981Small Quantity Baking:

10. Exactly the same procedures to be followed, substituting the following food items to be prepared by all the students:

Cheese Biscuits

Chocolate Cake & Chocolate Frosting

Blueberry Muffins

French Toast or Western Omelette

Day 3--First Cycle - 31 July 1981Cooking Skills Procedures:

11. Each student will be evaluated on performance of three different skills by one rater in a 30-minute period.
12. Skills to be evaluated are as follows:
 - a. Preparation and cooking of a brown roux.
 - b. Scaling and measuring ingredients (quantities and items to be decided).
 - c. Knife drills (skills to be decided).
13. Raters will use the confirmation task rating sheet (cooking skills) for each task.

Days 4 & 5--First Cycle - 6/7 August 1981Recipe Conversion and Garrison Equipment Procedures:

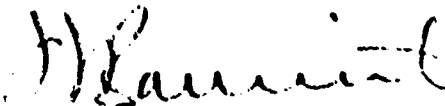
15. Each student will be given two recipes to convert. Results and work sheets will be rated in accordance with criterion rating sheets.
16. A maximum of 16 students will be evaluated and rated on confirmation tasks involving the inspection, operation, and cleaning of two items of equipment from the 10 previously trained.
17. The raters will observe what students do and the way they do it and rate their performance, using a criterion check list.
18. Raters will also interview students during the performance to obtain information about their knowledge of the equipment.
19. It is still to be decided which 2 out of 10 items of equipment will NOT be tested.
20. Students will be evaluated in the following sequence:

		R	R	R	R
Control	ICI	Equipment	Equipment	Equipment	Equipment
1-16	1-16	1-5-9-13	2-6-10-14	3-7-11-15	4-8-12-16

21. Equipment will alternate the next day so that 8 out of 10 are evaluated.

REACTION SURVEYS - STUDENTS/INSTRUCTORS

22. Reaction surveys to be administered to each student and instructor involved with the test at the conclusion of the test.



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6 July 1981

CONFIRMATION TASK RATING SHEET--FOOD ITEMS

STUDENT'S NAME/NO: _____ RATER'S NAME: _____

FOOD ITEM: _____ DATE: _____

Use the rating scale below to rate each listed criterion. Refer to rater's reference sheets for explanation of the criteria. Write remarks in the column labeled REMARKS.

0 = Not present (not done), 1 = Present (done) but not minimally acceptable,
 2 = Present (done) but only minimally acceptable (MALP), 3 = Present (done) above MALP,
 4 = Present (done at desired level for given conditions (DLP)).

RESULTS	RATING					REMARKS
Criterion #1--Taste/Flavor	0	1	2	3	4	
Criterion #2--Appearance	0	1	2	3	4	
Criterion #3--Texture//consistency	0	1	2	3	4	
Criterion #4--Garnish	0	1	2	3	4	
Criterion #5--Time to completion	0	1	2	3	4	
Criterion #6--Work area/resources (each confirmation task)						
- Utensils/equipment are clean	0	1	2	3	4	
- Work area is clean and ready for next use	0	1	2	3	4	
Criterion #7--Work area/resources (last confirmation task)						
- Utensils, equipment, supplies are returned to proper location.	0	1	2	3	4	

ADVANCED INDIVIDUAL TRAINING 34B10 TEST

DIRECTIONS FOR CONFIRMATION TASKS—FOOD ITEMS

The cooking tasks you will be doing today are designed to find out how well you can perform certain cooking procedures and prepare food items similar to those you learned to prepare in the small quantity cooking and baking phase of your training. This review day is to help us find out how well you can prepare food items on your own at this point in your training. We will know what needs to be done to help you become better at preparing tasty, attractive food.

As you prepare the food items, there will be an instructor observing what you do and taking notes. He will also observe the finished product, taste it, and rate it as poor, fair, good, or excellent. The ratings will not affect your progress. You will continue in your training no matter how well you do. These are the directions you are to follow:

1. You will prepare the following food items in the order they are listed. The time you have to prepare each item is written after each item. You do not have to wait until one item is completed before starting to prepare the next item. When each is finished to your satisfaction, notify the instructor so the item can be checked.
2. You will work at Station # _____. There is a card with that number at the Station.
3. All the recipe cards, ingredients, utensils, and equipment you need are at the Station or will be given to you when needed.
4. You are not to ask anyone for help. Do the best you can on your own.
5. As you prepare each food item, set aside all waste in the container marked WASTE.
6. If any part of these directions are unclear, get them answered BEFORE you go to your Station.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST
 CONFIRMATION TASK RATING SHEET--PROCEDURES

RATER'S NAME: _____ DATE: _____

Use the rating scale below to rate each listed criterion. Write remarks in the column labeled REMARKS.

0 = Did NOT do

1 = Did but NOT minimally acceptable

2 = Did at MALP

3 = Did above MALP but not to desired level performance (DLP)

4 = Did at DLP for given conditions

PROCEDURES	STUDENT	RATING	REMARKS
Criterion #1--Washed hands	(1)	0 1 2 3 4	
	(2)	0 1 2 3 4	
Criterion #2--Read complete recipe.	(1)	0 1 2 3 4	
	(2)	0 1 2 3 4	
Criterion 3--Checked equipment to be used.	(1)	0 1 2 3 4	
	(2)		
Criterion 4--Assembled all needed utensils.	(1)	0 1 2 3 4	
	(2)	0 1 2 3 4	
Criterion 5--Assembled all needed ingredients.	(1)	0 1 2 3 4	
	(2)	0 1 2 3 4	
Criterion 6--Followed the recipe procedures, step by step.	(1)	0 1 2 3 4	
	(2)	0 1 2 3 4	
Criterion 7--Used proper procedures to maintain sanitation and safety.	(1)	0 1 2 3 4	
	(2)	0 1 2 3 4	
Criterion 8--Prepared food item without waste.	(1)	0 1 2 3 4	
	(2)	0 1 2 3 4	
Criterion 9--Performed each cooking skill properly	(1)	0 1 2 3 4	
	(2)	0 1 2 3 4	
Criterion 10--Used "clean as you go" procedures.	(1)	0 1 2 3 4	
	(2)	0 1 2 3 4	
Criterion 11--Cleaned self/utensils/work area after completion of task.	(1)	0 1 2 3 4	
	(2)	0 1 2 3 4	

QUESTION SEQUENCE FOR FOOD PREPARATION PROCEDURE

WHILE OBSERVING THE STUDENT IN ACTION

1. What are you doing?
2. What is the reason you're _____ (Student's action) _____?
3. Why is that necessary?
4. What should the result look like if you _____ (Action) _____ properly?
5. What are you planning to do next?
6. Why would you want to _____ (Proposed action) _____ next?
7. What will you need to _____ (Proposed action) _____ properly?

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

CONFIRMATION TASK RATING SHEET--CONFIDENCE/ATTITUDE INDICATORS

RATER'S NAME: _____ DATE: _____

Use the rating scale below to rate each listed criterion. Write remarks in the column labeled REMARKS.

- 0 = Did NOT do
 1 = Did but NOT minimally acceptable
 2 = Did at MALP
 3 = Did above MALP but not to desired level performance (DLP)
 4 = Did at DLP for given conditions

CONFIDENCE/ATTITUDE INDICATORS	STUDENT	RATING	REMARKS
<u>Criterion #1</u> --Proceeded with the task without false starts or trial/error activity.	(1)	0 1 2 3 4	
	(2)	0 1 2 3 4	
<u>Criterion #2</u> --Attended to own actions and did not ask to others for help or guidance.	(1)	0 1 2 3 4	
	(2)	0 1 2 3 4	
<u>Criterion #3</u> --Stayed focused on the task and did not create or participate in irrelevant conversation or activity.	(1)	0 1 2 3 4	
	(2)	0 1 2 3 4	
<u>Criterion 4</u> --When difficulties arose, remained "cool under fire" and took actions to overcome them.	(1)	0 1 2 3 4	
	(2)	0 1 2 3 4	
<u>Criterion #5</u> --Showed concern for quality by checking results of actions as he/she progressed through the preparation tasks.	(1)	0 1 2 3 4	
	(2)	0 1 2 3 4	

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

RATER'S REFERENCE SHEET

FOOD ITEM (1)

FOOD ITEM: Potato Salad

RECIPE NO: M40(1)

CHARACTERISTICS OF FINISHED PRODUCT:

1. Taste/Flavor.

- Creamy, potato flavor.
- Seasoned to taste (not flat or overpowering).

2. Appearance.

- Potatoes are evenly diced and white.
- Eggs are hard boiled with a black ring around egg yolk.
- Color is creamy which is spotted with the color of the vegetables.
- All vegetables are well mixed and easily distinguishable.

3. Texture/Consistency.

- Potatoes are tender but firm (not mealy).
- Vegetables are crunchy.
- Sauce is smooth and of a coating consistency (not runny).

4. Garnish.

- Parsley is finely chopped.
- Paprika and parsley are lightly and evenly sprinkled on top.

5. Time to Completion:

- a. DLP: 2 Hrs.
- b. MALP: 2 Hrs, 30 Min.

M. SALADS, SALAD DRESSINGS, AND RELISHES No. 40(1)
POTATO SALAD

YIELD: 5 Portions				EACH PORTION: $\frac{2}{3}$ Cup
INGREDIENTS	WEIGHTS	MEASURES		METHOD
				1. Trim, wash, and prepare salad vegetables as directed on Recipe Card M-G-1.
Potatoes, white, fresh, diced $\frac{1}{2}$ inch	14½ oz ...	.....	.....	2. Cover potatoes with water; bring to a boil; add salt; cover. Cook until tender.
Water .....	.....	to cover	.....	3. Drain well. Cool slightly.
Salt .....	...	pinch	.....
Onions, dry, chopped	3/4 oz ...	...	.....	4. Combine onions, oil, salt, pepper, and vinegar. Add to potatoes. Cover; refrigerate 1 hour.
Salad oil .....	.....	...	.....
Salt .....	.....	to taste	.....
Pepper, black .....	.....	.....	.....
Vinegar	1/4 oz ...	...	.....

INGREDIENTS	WEIGHTS	MEASURES		METHOD
Celery, fresh, chopped	2½ oz. ....	...	.....	5. Combine celery, eggs, relish, pimientos, and Salad Dressing; add to potato mixture.
Eggs, hard cooked, chopped	.....	1 ea.	.....	6. Mix lightly but thoroughly to coat potatoes with Salad Dressing mixture.
Relish, pickle, sweet	3/4 oz ....	...	.....
Pimientos, canned, drained, chopped (optional)	1/2 oz ....	...	.....
Salad Dressing	3 oz. ....	.....	.....
Parsley, fresh, chopped	.....	pinch	.....	7. Garnish with parsley and paprika.
Paprika, ground ...	.....	pinch	.....	8. Cover; refrigerate until ready to serve.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

RATER'S REFERENCE SHEET

FOOD ITEM (2)

FOOD ITEM: Vegetable Soup

RECIPE NO: P7(1)

CHARACTERISTICS OF FINISHED PRODUCT:

1. Taste/Flavor.

- Beef and vegetable flavor
- Seasoned to taste (not flat or overpowering)
- Slight tang of garlic

2. Appearance.

- Color is a pale reddish brown.
- Vegetables are even in size and easily distinguishable (vegetables should not float on the surface).

3. Texture/Consistency.

- Thin, pouring consistency (unthickened liquid).
- Vegetables are tender but firm.

4. Garnish.5. Time to Completion.

- a. DLP: 1 Hr, 20 Min.
- b. MALP: 2 Hrs.

VEGETABLE SOUP

P. SOUPS No 7(1)

YIELD 5 Portions				EACH PORTION: 1 Cup
INGREDIENTS	WEIGHTS	MEASURES		METHOD
Garlic, dry, minced	...	1/2 clove	.....	1. Sauté garlic and onions in salad oil or shortening until tender. Set aside for use in Step 3.
Onions, dry, chopped	1 1/2 oz	...	.....
Salad oil or shortening, melted	3/4 oz	...	.....
Stock, beef	2 1/2 3/4 oz	...	.....	2. Heat stock. Add carrots and celery. Bring to a boil. Cover; reduce heat; simmer 15 minutes.
Carrots, fresh, chopped	1 1/2 oz	...	.....
Celery, fresh, chopped	1 1/2 oz	...	.....

INGREDIENTS	WEIGHTS	MEASURES		METHOD
Peppers, sweet, fresh, chopped	1/3 oz	3. Add sautéed garlic and onions, peppers, potatoes, cabbage, tomatoes, salt, and pepper; bring to a boil; reduce heat; simmer 30 minutes or until vegetables are tender.
Potatoes, white, fresh, diced	2 1/2 oz	...	.....
Cabbage, fresh, chopped	1 1/2 oz	...	.....
Tomatoes, canned, crushed	16 oz	...	.....
Salt	.....	pinch	.....
Pepper, black	.....	pinch	.....

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

RATER'S REFERENCE SHEET

FOOD ITEM (3)

FOOD ITEM: Baked Macaroni and Cheese

RECIPE NO: F-1(2)

CHARACTERISTICS OF FINISHED PRODUCT:

1. Taste/Flavor.

- Creamy, cheesy, macaroni flavor (not bland, dry, or sticky)
- Season to taste (not flat or overpowering)
- Sauce tastes smooth (not lumpy or floury)
- Bread crumbs taste buttery and crispy (not soggy or bready)

2. Appearance.

- Color is golden brown on top and cream-yellow underneath
- Macaroni and sauce are evenly distributed (one is not more predominant than the other)
- Bread crumbs are evenly distributed on top

3. Texture/Consistency.

- Creamy solid (not runny or stiff)

4. Garnish.5. Time to Completion.

- a. DLP: 75' - 90'
- b. MALP: 120'

a. Desired level of performance.

b. Minimum acceptable level of performance.

BAKED MACARONI AND CHEESE

YIELD: 5 Portions				EACH PORTION: 1 Cup
PAN SIZE:				TEMPERATURE: 350°F. Oven
INGREDIENTS	WEIGHTS	MEASURES		METHOD
Macaroni	6½ oz. ....	.....	.....	1. Add macaroni slowly to salted water; cook 15 minutes or until tender; stir occasionally to prevent sticking. 2. Drain. Set aside for use in Step 7.
Water, boiling .....	.....	1½ oz. ....	.....
Salt .....	.....	pinch ...	.....
Milk, nonfat, dry ...	1½ oz. ....	.....	.....	3. Reconstitute milk; heat to just below boiling. DO NOT BOIL.
Water, warm .....	.....	1 pt. ...	.....
Butter or margarine, melted	1½ oz. ...	.....	.....	4. Blend butter or margarine and flour together; stir until smooth. Add roux to hot milk, stirring constantly.
Flour, wheat, general purpose, sifted	¾ oz. ...	.....	.....

INGREDIENTS	WEIGHTS	MEASURES		METHOD
Salt .....	.....	1/4 tsp ..	.....	5. Add salt and pepper. Bring mixture to a boil; reduce heat; simmer 5 minutes or until thickened. Stir frequently to prevent scorching.
Pepper, black .....	.....	pinch ...	.....
Cheese, ground ...	6½ oz. ....	.....	.....	6. Add cheese to sauce; stir only until smooth; remove from heat.
				7. Combine sauce and macaroni; mix well.
				8. Place an equal quantity, about 3¼ gal, in each well-greased pan.
Bread crumbs, dry	¾ oz. ....	.....	.....	9. Combine bread crumbs and melted butter or margarine; sprinkle over mixture in each pan.
Butter or margarine, melted	1/3 oz. ...	.....	.....
				10. Bake 25 minutes or until brown.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

RATER'S REFERENCE SHEET

FOOD ITEM (4)

FOOD ITEM: French Fried Onion Rings

RECIPE NUMBER: Q 35 (2)

CHARACTERISTICS OF FINISHED PRODUCT:

1. Taste/Flavor

- Oniony, crisp
- Seasoned to taste (not flat or overpowering)

2. Appearance

- Color is golden brown, shell with the onion flesh visible in places
- Onion rings are individual (not stuck together)

3. Texture/Consistency

- Crispy outer coating with tender but firm onion flesh inside

4. Garnish5. Time to Completion

- a. DLP: 30 Minutes
- b. MALP: 45 Minutes

FRENCH FRIED ONION RINGS (Flour Method)

YIELD 5 Portions				EACH PORTION: 1 Cup
TEMPERATURE: 350°F. Deep Fat				
INGREDIENTS	WEIGHTS	MEASURES		METHOD
Onions, dry, cut into slices, 1/2 inch thick	1 lb. ....	.....	.....	1. Separate onion slices into rings. Cover with cold water. Let stand 10 to 15 minutes. Drain.
Water, cold .....	.....	to cover ..	.....
Flour, wheat, general purpose, sifted	6 1/2 oz. ....	.....	.....	2. Dredge onion rings in mixture of flour, salt, and pepper; shake off excess. Save remaining seasoned flour for use in Step 4.
Salt .....	.....	1/2 tsp ...	.....
Pepper, black .....	.....	to taste ..	.....

INGREDIENTS	WEIGHTS	MEASURES		METHOD
Milk, nonfat, dry ...	1 1/2 oz.	3. Reconstitute milk; dip floured onion rings into milk. Drain well. 4. Dredge each onion ring in remaining seasoned flour until well coated; shake off excess. 5. Fry 2 minutes or until golden brown. 6. Drain well in basket or on absorbent paper.
Water, warm .....	.....	6 oz. ....	.....

NOTE: 1. In Step 1, 22 lb 4 oz dry onions A.P. will yield 20 lb sliced onions.
2. In Step 3, the ratio of nonfat dry milk to water has been doubled.

VARIATIONS

1. **ONION RINGS (FROZEN):** Omit Steps 1 through 5. Use 25 lb (5-5 lb pg) frozen breaded onion rings. Fry according to directions on package. Follow Step 6.
2. **TEMPURA FRIED ONION RINGS:** Follow Step 1. Omit Steps 2 through 4; substitute 2 gal Tempura Batter (Recipe No. D-52) for ingredients. Dip individual onion rings into batter. In Step 5, drop onion rings gently into 350°F. deep fat; fry approximately 1 1/2 minutes or until golden brown. Follow Step 6.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

RATER'S REFERENCE SHEET

FOOD ITEM (5)

FOOD ITEM: Waldorf Salad

RECIPE NO: M50(1)

CHARACTERISTICS OF FINISHED PRODUCT:

1. Taste/Flavor.

- Sauce is smooth and faintly sweetened.
- Apples and celery are crisp and full of flavor.
- Walnuts are crunchy.

2. Appearance.

- Celery and apples are uniform in size, lightly bound with the creamy white sauce.
- Walnuts are coarsely chopped.
- All ingredients are well mixed but easily distinguishable.

3. Texture/Consistency.

- Sauce is of a coating consistency (not runny).
- Apples and celery are fresh and crunchy.

4. Garnish.

- Lettuce is crisp, free from discoloration with excess leaf core removed.

5. Time to Completion.

- a. DLP: 30 Min.
- b. MALP: 45 Min.

M. SALADS, SALAD DRESSINGS, AND RELISHES No. 50(N)
WALDORF SALAD

YIELD 5 Portions				EACH PORTION: 1/2 Cup
INGREDIENTS	WEIGHTS	MEASURES		METHOD
				1. Trim, wash, and prepare fruit and vegetables as directed on Recipe Card M-G-1.
Apples, fresh, eating, unpared, cored, diced 1/2 inch	7 oz .....	.....	.....	2. Place diced apples in salted water until ready to mix. Drain well.
Water, cold .....	.....	3/4 pt. ....	.....
Salt .....	.....	to taste ..	.....
Celery, fresh, diced, 1/2-inch	3 1/2 oz. ....	.....	.....	3. Add celery and nuts to drained apples. Toss well.
Walnuts, coarsely chopped	3/4 oz. ....	.....	.....

INGREDIENTS	WEIGHTS	MEASURES		METHOD
Milk, nonfat, dry ..	.....	1/2 tsp ..	.....	4. Reconstitute milk.
Water, warm	1 1/3 oz. ....	.....	.....	5. Add milk, lemon juice, and sugar to Salad Dressing; mix well.
Juice, lemon .....	.....	to taste ..	.....	6. Add to apple mixture tossing well to coat pieces.
Sugar, granulated ..	to taste ..	.....	.....
Salad Dressing	2 oz. ....	.....	.....	7. Place 1 lettuce leaf on each serving dish; add salad. Cover; refrigerate until ready to serve.
Lettuce, fresh, trimmed (optional)	3 1/2 oz. ....	.....	.....

NOTE. 1. In Step 1: 10 lb 10 oz fresh eating apples A.P. will yield 9 lb unpared, diced apples.
 5 lb 8 oz fresh celery A.P. will yield 4 lb diced celery.
 12 oz lemons A.P. (3 lemons) will yield 1/2 cup juice.
 4 lb 5 oz fresh lettuce A.P. will yield 4 lb trimmed lettuce.

2. In Step 2, diced apples may be dipped in solution of antioxidant and water to prevent discoloration. See Recipe Card A-20.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

RATER'S REFERENCE SHEET

FOOD ITEM (6)

FOOD ITEM: Chicken Vegetable (Mulligatawny) Soup

RECIPE NO: P20 (1+2)

CHARACTERISTICS OF FINISHED PRODUCT:

1. Taste/Flavor.

- Spicy, curry flavor but not overpowering
- Chickeny
- Vegetables full of individual flavors

2. Appearance.

- Color is a pale yellowish brown.
- Vegetables and fruits are easily distinguishable when soup is stirred.

3. Texture/Consistency.

- Vegetables are tender but firm (not mushy).
- Liquid is lightly thickened but still has a pouring consistency.

4. Garnish.5. Time to Completion.

- a. DLP: 1 Hr, 10 Min.
- b. MALP: 1 Hr, 30 Min.

CHICKEN VEGETABLE (MULLIGATAWNY) SOUP

P SOUPS No. 20(1)

YIELD: 5 Portions				EACH PORTION: 1 Cup
INGREDIENTS	WEIGHTS	MEASURES		METHOD
Onions, dry, chopped	3/4 oz. ....	.....	.....	1. Sauté onions and peppers in butter or margarine until tender. Remove from fat; set aside for use in Step 4.
Peppers, sweet, fresh, chopped	1 1/4 oz. ....	.....	.....
Butter or margarine	3/4 oz. ....	.....	.....
Flour, wheat, general purpose, sifted	1/2 oz. ....	.....	.....	2. Blend fat and flour to form a paste.
Stock, chicken, hot	.....	2 1/2 pts. ...	.....	3. Add flour mixture to stock, stirring constantly. Cook until blended.

etc.

INGREDIENTS	WEIGHTS	MEASURES		METHOD
Tomatoes, canned, crushed	5 oz. ....	.....	.....	4. Add sautéed onions and peppers, tomatoes, carrots, celery, apples, curry powder, cloves, salt, and pepper. 5. Simmer 45 minutes or until vegetables are tender.
Carrots, fresh, diced	3/4 oz. ....	.....	.....
Celery, fresh, diced	3/4 oz. ....	.....	.....
Apples, cooking, diced or sliced	1 1/4 oz. ....	.....	.....
Curry powder	1/4 oz. ....	.....	.....
Cloves, ground	.....	to taste	.....
Salt	.....	to taste	.....
Pepper, black	.....	to taste	.....

RATER'S REFERENCE SHEET

FOOD ITEM (7)

FOOD ITEM: Chicken Fried Steaks

RECIPE NUMBER: L12 (1+2)

CHARACTERISTICS OF FINISHED PRODUCT:

1. Taste/Flavor.

- Beefy flavor
- Seasoned to taste (not flat or overpowering)

2. Appearance.

- Color is golden brown outer with grayish (well done) meat inside.
- Steaks are even in size.
- Evenly coated with flour and bread crumbs.

3. Texture/Consistency.

- Coating is moist and soft.
- Firm and moist beef.

4. Garnish.

5. Time to Completion.

- a. DLP: 2 Hrs, 20 Min.
- b. MALP: 3 Hrs.

CHICKEN FRIED STEAKS

YIELD 5 Portions (5 Pans)				EACH PORTION: 1 Steak
PAN SIZE 18 by 24 inch Roasting Pan			TEMPERATURE: 350°F. Griddle; 350°F. Oven	
INGREDIENTS	WEIGHTS	MEASURES		METHOD
Beef, Braising Steak, Swiss, tempered		5 steaks	.....	1. Dredge steaks in mixture of flour, salt, pepper, and monosodium glutamate; shake off excess.
Flour, wheat, general purpose, sifted	1½ oz. ....	.....	.....
Salt .....	.....	1/4 tsp .....	.....
Pepper, black .....	.....	pinch .....	.....
Monosodium glutamate (optional)	.....	pinch .....	.....

INGREDIENTS	WEIGHTS	MEASURES		METHOD
Milk, nonfat, dry ..	1/4 oz. ....		.....	2. Reconstitute milk; add eggs, blend thoroughly.
Water	3/4 .....		.....
Eggs, whole, slightly beaten	1½ oz. ....		.....
Bread crumbs, dry, ground	2 oz. ....		.....	3. Combine bread crumbs, salt, and pepper.
Salt .....	.....	pinch .....	.....
Pepper, black .....	.....	pinch .....	.....	4. Dip steaks in egg and milk mixture; then in seasoned bread crumbs.
Shortening, melted or salad oil	1½ oz. ....		.....	5. Brown steaks evenly on both sides on well greased griddle.
				6. Overlap steaks in lightly greased pans. Cover pans tightly.
				7. Bake 2 hours or until steaks are tender.

NOTE: 1. In Step 2, 10 oz (2½ cups) canned dehydrated egg mix combined with 3 cups warm water may be used for whole eggs. See Recipe Card A-8.

2. Other sizes and types of pans may be used. See Recipe Card A-25.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

RATER'S REFERENCE SHEET

FOOD ITEM (8)

FOOD ITEM: Cauliflower Au Gratin

RECIPE NO: Q18

CHARACTERISTICS OF FINISHED PRODUCT:

1. Taste/Flavor

- Creamy, cheesy, cauliflower flavor
- Seasoned to taste (not flat or overpowering)
- Bread crumbs taste buttery and crisp (not stoggy)

2. Appearance

- Color is golden brown on top, creamy yellow sauce coat over firm white cauliflower
- Bread crumbs and sauce are evenly distributed over cauliflower

3. Texture/Consistency

- Cauliflower is tender but firm (not mushy)
- Sauce is smooth, lump free, not curdled and of a coating consistency.

4. Garnish5. Time to Completion

- a. DLP: 65 Minutes
- b. MALP: 105 Minutes

CAULIFLOWER AU GRATIN

YIELD: 5 Portions (Pans)				EACH PORTION: ½ Cup
PAN SIZE: 18 by 24 inch Roasting Pan				TEMPERATURE: 350°F. Oven
INGREDIENTS	WEIGHTS	MEASURES		METHOD
Cauliflower, frozen	1 lb. ....	.....	.....	1. Add cauliflower to salted water.
Salt .....	.....	pinch ..	.....	2. Bring to a boil; cover. Simmer 4 to 8 minutes or until cauliflower is just tender.
Water, boiling .....	.....	¼ pt's....	.....	3. Drain; place cauliflower in each pan. Set aside for use in Step 9.
Milk, nonfat, dry ..	2/3 oz. ....	.....	.....	4. Reconstitute milk; heat to just below boiling. DO NOT BOIL.
Water, warm	6 oz. ....	.....	.....
Butter or margarine, melted	3/4 oz. ....	.....	.....	5. Blend butter or margarine and flour together; stir until smooth.
Flour, wheat, general purpose, sifted	1/3 oz. ....	.....	.....	6. Add flour mixture to milk, stirring constantly. Simmer 5 minutes or until thickened.

INGREDIENTS	WEIGHTS	MEASURES		METHOD
Salt .....	.....	pinch ..	.....	7. Season with salt as needed.
Cheese, ground ...	¼ oz. ....	.....	.....	8. Add cheese; stir until blended.
				9. Pour sauce over cauliflower in each pan.
Bread crumbs, dry ..	¼ oz. ....	.....	.....	10. Mix crumbs and butter or margarine. Sprinkle an equal quantity over cauliflower in each pan.
Butter or margarine, melted	1/3 oz. ....	.....	.....	11. Bake 15 minutes or until crumbs are browned.

NOTE: 1. In Step 1, 24 lb fresh cauliflower A.P. will yield 20 lb cauliflower.
 2. Other sizes and types of pans may be used. See Recipe Card A-25.

VARIATION

1. **CURRIED CAULIFLOWER WITH PEAS:** In Step 1, use 10 lb frozen cauliflower, 1½ oz (2½ tsp) salt and 1½ gal boiling water. Follow Step 2. Prepare 10 lb frozen peas according to Recipe Card Q-G-3. Drain peas; reserve liquid. In Step 3, place equal quantities of cauliflower and peas in each pan. Follow Steps 4 through 6. In Step 7, add 2 tsp curry powder. Omit Step 8. In Step 9, pour 2 qt sauce over vegetables in each pan. Follow Steps 10 and 11.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

RATER'S REFERENCE SHEET

FOOD ITEM (9)

FOOD ITEM: Baking Powder Biscuits

RECIPE NO. D1 (2+3)

CHARACTERISTICS OF FINISHED PRODUCT.

1. Taste/Flavor.

- Flavored bread taste.

2. Appearance.

- Golden brown bottom and top with a paler side and creamy white inner.
- Dimensions are 1" high by 2 1/2" in diameter with straight sides and a smooth rounded top.

3. Texture/Consistency.

- Crusty outside with moist inner.
- Tender with a flaky crust.

4. Garnish.

5. Time to Completion.

- a. DLP: 1 Hr.
- b. MALP: 1 Hr, 10 Min.

D BREADS AND SWEET DOUGHES No. 1 (2)

BAKING POWDER BISCUITS

YIELD 6 Portions (1 Pan)					EACH PORTION: 2 Biscuits
PAN SIZE 18 By 26 inch Sheet Pan					TEMPERATURE: 450°F. Oven
PER CENT	INGREDIENTS	WEIGHTS	MEASURES		METHOD
50 66	Flour, wheat, general purpose, sifted	1½ oz . . . .	. . . .	. . . . .	1. Sift together flour, milk, baking powder, and salt into mixer bowl.
3 43	Milk, nonfat, dry	. . . . .	5½ tsp	
2 64	Baking powder	. . . . .	4 tsp	
1 06	Salt . . . . .	. . . . .	1 1/8 tsp	
10 55	Shortening	2½ oz . .	. . . . .	. . . . .	2. Blend shortening at low speed into dry ingredients until mixture resembles coarse cornmeal.

PER CENT	INGREDIENTS	WEIGHTS	MEASURES		METHOD
31 66	Water . . . . .	. . . . .	1 cup . . .	. . . . .	3. Add water; mix at low speed only enough to form a soft dough.
100 00					4. Place dough on lightly floured board. Knead lightly, approximately 1 minute or until dough is smooth.
					5. Roll or pat out to a uniform thickness of ½ inch.
					6. Cut with 2½-inch floured biscuit cutter. Place biscuits on pans in rows 6 by 9.
					7. Bake 15 minutes or until lightly browned.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

RATER'S REFERENCE SHEET

FOOD ITEM (10)

FOOD ITEM: Blueberry Muffins

RECIPE NO: D30 (1+2)

CHARACTERISTICS OF FINISHED PRODUCT:

1. Taste/Flavor.

- Sweet and bready.
- Blueberry flavored.

2. Appearance.

- Uniform size and shape with a smooth rounded top.
- Golden brown with blueish seepage around the berries on the outside, the inside pale creamy yellow with the same seepage around the berries.

3. Texture/Consistency.

- Tender, crumbly, particularly moist around the berries.
- Medium-fine evenly distributed air spaces.

4. Garnish.

5. Time to Completion.

- a. DLP: 1 Hr.
- b. MALP: 1 Hr, 20 Min

D BREADS AND SWEET DOUGHS NO. 30(1)

PLAIN MUFFINS

YIELD: 5 Portions		EACH PORTION: 2 Muffins			
PAN SIZE: 12 Cup Muffin Pan		TEMPERATURE: 400°F. Oven			
PER CUP	INGREDIENTS	WEIGHTS	MEASURES		METHOD
15 34	Flour, wheat, general purpose, sifted	7½ oz. ....	...	.....	1. Sift together flour, baking powder, milk, salt, and sugar into mixer bowl.
1 72	Baking powder	1/3 oz. ....	...	.....
1 93	Milk, nonfat, dry	3/4 oz. ....	...	.....
61	Salt	pinch ...	...	.....
1 93	Sugar, granulated	3/4 oz. ....	...	.....

PER CUP	INGREDIENTS	WEIGHTS	MEASURES		METHOD
9 81	Eggs, whole, beaten	2 oz	2. Combine eggs, shortening, and water; mix well. 3. Add egg mixture to dry ingredients. Mix at low speed just enough to blend. DO NOT OVERMIX. 4. Fill each well-greased muffin cup ¾ full (1-No. 16 scoop). 5. Bake for 20 minutes or until done.
9 82	Shortening, melted	2 oz .	...	.....
15 34	Water	7½ oz. ....	...	.....
100 00					

BLUEBERRY MUFFINS: In Step 1, increase granulated sugar to 1½ oz. Follow Step 2.
In Step 3, carefully fold 4 oz. thawed, frozen blueberries or 5 oz.
canned, drained, blueberries into batter. Follow Steps 4 and 5.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

RATER'S REFERENCE SHEET

FOOD ITEM (11a)

FOOD ITEM: Chocolate Cake

RECIPE NO: G9 (1+2)

CHARACTERISTICS OF FINISHED PRODUCT.

1. Taste/Flavor.

- Sweet, strong chocolate smell.
- Chocolaty.

2. Appearance.

- Slightly rounded top with even sides.
- Uniform chocolate brown color (once cut it will be dark on the inside).

3. Texture/Consistency.

- Moist, crumbly.
- Medium grain with some large holes.

4. Garnish.5. Time to Completion.

- a. DLP: 35 Min.
- b. MALP: 50 Min.

G DESSERTS (CAKES, FILLINGS, AND FROSTINGS) No. 9(1)
CHOCOLATE CAKE

YIELD 8 Portions (Pans)					EACH PORTION: 1 Piece
PAN SIZE 18 By 26-inch Sheet Pan					TEMPERATURE: 350°F. Oven
PER CENT	INGREDIENTS	WEIGHTS	MEASURES		METHOD
17 83	Flour, wheat, general purpose, sifted	4 1/2 oz ....	.....	.....	1. Sift together flour, sugar, salt, baking powder, baking soda, cocoa, and milk into mixer bowl.
28 23	Sugar, granulated	6 3/4 oz :	.....	.....
65	Salt .....	.....	pinch	.....
74	Baking powder ..	1/4 oz ....	.....	.....
19	Baking soda ....	.....	pinch	.....
8 17	Cocoa	2 oz ....	.....	.....
2 97	Milk, nonfat, dry	3/4 oz ....	.....	.....

PER CENT	INGREDIENTS	WEIGHTS	MEASURES		METHOD
8 17	Shortening	2 oz ....	.....	.....	2. Add shortening and water to dry ingredients. Beat at low speed 1 minute or until blended; continue beating at medium speed 2 minutes. Scrape down bowl.
14 85	Water	3 1/2 oz ..	.....	.....
10 40	Eggs, whole	2 1/2 oz	.....	.....	3. Combine eggs, water, and vanilla. Add slowly to mixture while beating at low speed. Scrape down bowl. Beat at medium speed 3 minutes.
7 43	Water	1 3/4 oz ..	.....	.....
37	Vanilla .....	.....	2 drops, ..	.....
100 00					4. Pour batter into each greased and floured pan. 5. Bake 30 to 35 minutes or until done. 6. Cool; frost if desired. Cut 6 by 9.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

RATER'S REFERENCE SHEET

FOOD ITEM (11b)

FOOD ITEM: Butter Cream Frosting

RECIPE NO: G39(2)

CHARACTERISTICS OF FINISHED PRODUCT.

1. Taste/Flavor.

- Creamy, sweet buttery.
- Faint vanilla flavor (not overpowering).

2. Appearance.

- Color light beige-yellow.
- Well blended paste.

3. Texture/Consistency.

- Light and aerated.
- Smooth, evenly distributed ingredients (no lumps).

4. Garnish.5. Time to Completion.

- a. DLP: 10 Min.
- b. MALP: 12 Min.

G. DESSERTS (CAKES, FILLINGS, AND FROSTINGS) No. 39(2)
BUTTER CREAM FROSTING

YIELD: 1 lb. (1 1/4 Quarts Per Sheet Cake)				
INGREDIENTS	WEIGHTS	MEASURES		METHOD
Butter or margarine	4 oz.			1. Cream butter or margarine in mixer bowl at medium speed 1 to 3 minutes or until light and fluffy.
Sugar, powdered, sifted	15 1/2 oz.			2. Sift together powdered sugar, salt, and milk; add to creamed butter or margarine.
Salt				
Milk, nonfat, dry	1/2 oz.			
Vanilla		1/4 tsp.		3. Add vanilla while mixing at low speed; add just enough water to obtain a spreading consistency. Scrape down bowl. Beat at medium speed 3 to 5 minutes or until mixture is light and well blended.
Water	1 1/2 oz. variable			4. Spread immediately on cool cakes.

NOTE 1. For six 9-inch (2 layer) cakes: Spread about 1 1/4 cups (1 lb) frosting on each cake.
 2. For 13 dozen cupcakes: Spread about 1 tbsp frosting on each cupcake.

VARIATIONS

1. **BANANA BUTTER CREAM FROSTING:** Follow Step 1. In Step 2, omit nonfat dry milk. In Step 3, omit vanilla and water. Peel and mash 1 lb 3 oz bananas A.P. (3 bananas); add mashed bananas and 1 1/2 oz (3 tbsp) lemon juice. Follow Step 4.
2. **CHOCOLATE BUTTER CREAM FROSTING:** Follow Step 1. In Step 2, add 12 oz (3 cups) cocoa; use 1 1/4 cups boiling water in Step 3. Follow Step 4.
3. **COCONUT BUTTER CREAM FROSTING:** Follow Steps 1 and 2. In Step 3, fold in 8 oz (3 cups) chopped, prepared, sweetened coconut. Follow Step 4. Use 8 oz (3 cups) coconut; sprinkle evenly over each frosted cake.
4. **LEMON BUTTER CREAM FROSTING:** Follow Steps 1 and 2. In Step 3, omit vanilla; add 4 tbsp (1/4 cup) grated lemon rind and 6 tbsp lemon juice. Follow Step 4.
5. **MAPLE BUTTER CREAM FROSTING:** Follow Steps 1 and 2. In Step 3, use 1 tbsp vanilla and 3 tbsp maple flavoring. Follow Step 4.
6. **MOCHA BUTTER CREAM FROSTING:** Follow Step 1. In Step 2, omit nonfat dry milk; add 4 oz (1 cup) cocoa. In Step 3, omit water and vanilla; add 1 cup double-strength coffee. Follow Step 4.
7. **ORANGE BUTTER CREAM FROSTING:** Follow Step 1. In Step 2, omit nonfat dry milk. In Step 3, omit water and vanilla; add 1 oz (1/2 cup) grated orange rind and 1 cup orange juice. Follow Step 4.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

RATER'S REFERENCE SHEET

FOOD ITEM (12)

FOOD ITEM: French Toast

RECIPE NO: D22

CHARACTERISTICS OF FINISHED PRODUCT:

1. Taste/Flavor

- Eggy and sweet
- Bread taste

2. Appearance

- Golden yellow/brown
- Size and shape of bread slice

3. Texture/Consistency

- Moist and soft but not soggy

4. Garnish5. Time to Completion

- a. DLP: 20 Minutes
- b. MALP: 30 Minutes

FRENCH TOAST

YIELD: 5 Portions				EACH PORTION: 2 Slices
TEMPERATURE: 375°F. Griddle				
INGREDIENTS	WEIGHTS	MEASURES		METHOD
Water	3½ oz .....		.....	1. Place water in mixer bowl.
Milk, nonfat, dry ..	1/3 oz ....		.....	2. Combine milk, salt, and sugar; blend well. Add to water; stir until dissolved.
Salt		pinch ..	.....
Sugar, granulated ..	1½ oz ..		.....
Eggs, whole, slightly beaten	10 oz		.....	3. Add eggs to ingredients in mixer bowl; whip.
Bread, dry, sliced	.....	10 slices ..	.....	4. Dip bread in egg mixture to coat both sides. 5. Place on well-greased griddle; fry on one side until golden brown. Turn; fry on other side until golden brown. 6. Serve immediately.
Shortening, melted or salad oil	1½ oz .....		.....

VARIATIONS

1. CINNAMON FRENCH TOAST: Follow Step 1. In Step 2, add 1 ct (¼ cup) ground cinnamon. Follow Steps 3 through 6.
2. FRENCH TOAST (DEHYDRATED EGG MIX): Omit Steps 1 through 3. Combine 3 lb 12 oz (3 No. 3 cyl cn) canned dehydrated egg mix; 1 oz salt (1½ tsp) and 8 oz (1 cup) granulated sugar in mixer bowl. Add 2 qt lukewarm water to egg mixture; stir until a smooth paste is formed. Add 3 qt lukewarm water. Whip until well blended. Refrigerate until ready to use. Follow Steps 4 through 6.
3. NUTMEG FRENCH TOAST: Follow Step 1. In Step 2, add 1½ tsp ground nutmeg. Follow Steps 3 through 6.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

RATER'S REFERENCE SHEET

FOOD ITEM (13)

FOOD ITEM: Western Omelet

RECIPE NUMBER: P11(1) & 8(2)

CHARACTERISTICS OF FINISHED PRODUCT:

1. Taste/Flavor.

- Cheesy and egg flavored
- Seasoned to taste (not flat or overpowering)

2. Appearance.

- A yellowish golden brown
- Rectangle tri-folded, filled with grated cheese

3. Texture/Consistency.

- Firm, moist, and spongy

4. Garnish.5. Time to Completion.

- a. DLP: 20 Minutes
- b. MALP: 30 Minutes

PLAIN OMELET

YIELD 2 Portions				EACH PORTION: 1 Omelet
TEMPERATURE: 325°F. Griddle				
INGREDIENTS	WEIGHTS	MEASURES		METHOD
Eggs, whole	4 eggs	.....	1. Place shelled eggs in mixer bowl. Using wire whip, beat just enough to blend yolks and whites.
Salt	to taste	.....	2. Add salt and pepper; mix thoroughly.
Pepper, black	to taste	.....
Shortening, melted or salad oil	1/4 oz. ....	.....	3. Pour 1/2 cup (1-3 oz ladle) egg mixture for individual omelets on greased griddle. 4. Cook until bottom is golden brown. DO NOT STIR. If necessary, gently lift cooked portion with a spatula to permit uncooked mixture to flow underneath. Continue cooking until eggs are set.

INGREDIENTS	WEIGHTS	MEASURES		METHOD
				5. Fold omelet in half or into thirds making a long oval shaped omelet. Serve immediately or place in a hot steam table pan.

3. **CHEESE OMELET:** Follow Steps 1 through 3. In Step 4, use 4 oz. grated or shredded cheese; sprinkle about 2 tbsp (1-No. 30 Scoop) over eggs when partially set. Follow Step 5.
- Note:** canned, dehydrated cheese combined with warm water may be substituted for grated or shredded cheese. See Recipe Card F-G-1.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

DIRECTIONS FOR CONFIRMATION TASKS--COOKING SKILLS

Today, you will be checked on how well you can perform specific cooking skills you practiced in the small quantity cooking and baking phase of your training.

You will be given the opportunity to do it the best you can while an instructor observes you and rates your performance. This review task will make it possible for the instructors to help you improve your skills so you can use them to prepare food items that soldiers will enjoy eating.

You are to report to Station # _____. An instructor will be there to meet you and tell you what skills you are to demonstrate. He will also ask you certain questions so you can explain what you are doing and why.

All the utensils, equipment, and ingredients you will need will be given to you by the instructor.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST
CONFIRMATION TASK RATING SHEET--COOKING SKILLS

STUDENT'S NAME/NO: _____

RATER'S NAME: _____

CONFIRMATION TASK: _____ **DATE:** _____

Use the rating scale below to rate each listed criterion. Refer to rater's reference sheets for explanation of the criteria. Write remarks in the column labeled **REMARKS**.

() = Not present (not done)

3 - Present (done) above MALP

1 = Present (done) but not minimally acceptable.

4 = Present (done at desired level for given conditions) (DLP).

2 = Present (done) but only minimally acceptable (MALP)

RESULTS	RATING	REMARKS
<u>Criterion #1:</u> Finely shredded fresh cabbage.	0 1 2 3 4	
<u>Criterion #2:</u> Diced fresh sweet pepper (1/2 inch).	0 1 2 3 4	
<u>Criterion #3:</u> Sliced fresh pared cucumber (1/8 inch).	0 1 2 3 4	
<u>Criterion #4:</u> Cutting tomato wedges (8)	0 1 2 3 4	
<u>Criterion #5:</u> Making a brown roux.	0 1 2 3 4	

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

RATER'S REFERENCE SHEET

COOKING SKILLS

1. Skill: Finely shredding fresh cabbage.a. Procedure:

- (1) Remove any wilted leaves.
- (2) Divide necessary amount (1/4 cabbage).
- (3) Wash under cold running water.
- (4) Place flat side down on cutting board.
- (5) Using cook's knife, cut thin slices (shredding).
- (6) Place in large mixing bowl.

b. Appearance: Evenly finely shredded cabbage.c. Time to Completion:

- (1) DLP: 5 Minutes.
 - (2) MALP: 8 Minutes.
-

2. Skill: Dicing fresh sweet pepper (1/2-inch).a. Procedure:

- (1) Remove any bad spots with a paring knife.
- (2) Using paring knife, remove stem.
- (3) Cut pepper in half length ways.
- (4) Remove the white membrane.
- (5) Wash pepper under cold running water to remove all the seeds.
- (6) Place pepper on cutting board and cut into 1/2-inch strips.
- (7) Using cook's knife, cut 1/2-inch strips into 1/2-inch dice, using one whole pepper.
- (8) Place into large mixing bowl.

b. Appearance: Evenly 1/2-inch diced peppers.c. Time to Completion:

- (1) DLP: 5 Minutes
 - (2) MALP: 8 Minutes
-

3. Skill: Sliced fresh-pared Cucumber (1/8-inch).

a. Procedure:

- (1) Using vegetable peeler, remove skin from cucumber from end to end.
- (2) Using cook's knife, cut slices of cucumber 1/3-inch thick, using one whole cucumber, which should be laying on the cutting board.

b. Appearance: Evenly 1/8-inch slices of cucumber devoid of skin.

c. Time to Completion:

- (1) DLP: 5 Minutes
 - (2) MALP: 8 Minutes
-

4. Skill: Cutting fresh tomato wedges.

a. Procedure:

- (1) Using a paring knife, remove the core from the tomato.
- (2) Place the tomato on the cutting board, cut in half, lay each half down on the board and cut in half, cut each piece in half once more.

b. Appearance: 8 evenly cut and equally-sized wedges of tomato.

c. Time to Completion:

- (1) DLP: 2 Minutes.
- (2) MALP: 3 Minutes

5. Skill: Making a brown roux.

a. Procedure:

- (1) Measure the required ingredients.
- (2) Heat the required amount of fat (shortening) in pan.
- (3) Sprinkle the required amount of flour evenly over heated fat. Using a wire whip, stir flour into heated shortening. Cook over low heat. Keep stirring to blend and keep mixture smooth and free of lumps.
- (4) Continue to cook roux over low heat. Stir until roux is evenly brown in color.

b. Appearance: Smooth, evenly-browned mixture, free from lumps, cooked out, and not burned.

c. Time to Completion:

- (1) DLP: 10 Minutes.
- (2) MALP: 12 Minutes.

1A--HANDLING, INSPECTING, SHARPENING, AND CLEANING KNIVES

WHAT	HOW	RESULTS
1. Handle the knife in a safe, efficient manner	<p>a. When not using the knife, lay it on the table or cutting board on its side, <u>not</u> with the cutting edge up.</p> <p>b. When carrying a knife, hold it by the handle with the blade laying flat up against the back of your forearm and your arm held slightly back.</p> <p>c. When getting ready to use the knife for cutting, hold it firmly by the handle and with the toe of the knife pointed slightly downward.</p>	1. Neither you or anyone will be accidentally hurt and the knife will not be accidentally damaged.
2. Inspect the knife	<p>a. Examine the handle and the blade carefully. Check for loose or damaged handle; rust, chips, or deep gashes in blades; dirt or grease on either handle or blade.</p> <p>b. If knife is damaged so it is unsafe to use, notify the person in charge and obtain another one. If knife blade just needs sharpening, use procedure #3 below. If knife just needs cleaning, use procedure #4 below.</p>	2. Knife has been carefully inspected and the proper action has been taken to have a clean sharp, safe knife to use.
3. Sharpen the knife	<p>a. Take the knife to the place where the sharpening stone is located.</p> <p>b. Remove the cover from the stone. Check to make sure there is oil (edible oil) in the well.</p> <p>c. Holding both handles, rotate the stone so the <u>coarse</u> side is facing up.</p> <p>d. Position yourself and the stone so you will have room to slide the knife blade diagonally across the stone. (Stone about 6"-8" away from the edge of the table.)</p> <p>e. Hold the knife firmly by the handle. Lay the knife blade flat on the stone. Lay the fingers of the other hand lightly on the knife blade close to the toe of the blade but not near the cutting edge. (This is to balance and guide the knife.)</p> <p>f. Draw the knife edge diagonally across the stone, heel to toe, several times, sharpening one side of the cutting edge.</p>	3. Cutting edge of knife is sharp so food can be easily and safely cut as desired. Knife blade has not been damaged.

1A--HANDLING, INSPECTING, SHARPENING, AND CLEANING KNIVES
(Continued)

WHAT	HOW	RESULTS
	<p>g. Turn the knife over so the other side of the blade is in contact with the stone. Hold and balance the knife as before, and, again, draw the blade diagonally across the stone, heel to toe, several times to sharpen the other side of the cutting edge.</p> <p>h. Carefully lay the knife down and rotate the stone so the <u>medium</u> side is facing up.</p> <p>i. Repeat f and g above, sharpening both sides of the knife on the <u>medium</u> stone.</p> <p>j. Carefully lay the knife down and rotate the stone so the <u>fine</u> side is facing up.</p> <p>k. Repeat f and g above, sharpening both sides of the knife on the <u>fine</u> stone.</p> <p>l. Replace the cover on the sharpening stone and move back to original position.</p> <p>m. Clean the knife using procedure #4 below.</p>	
4. Clean the knife	<p>a. (After Sharpening) Hold the knife handle firmly. Lay the blade of the knife flat on the table top. Butt the handle up against the edge of the table so the entire blade, heel to toe, is lying flat on the surface. Use a clean towel to rub the whole blade clean on one side. Turn the knife over and position it again by butting the handle against the table edge and keeping the blade flat on the surface. Rub the other side of the knife clean.</p> <p>b. (When dirty) Hold the knife handle and swish the blade in warm, soapy water. Position the knife as in a above and wash the blade on both sides with scouring pad, towel, etc. Rinse in hot water. Position knife again on surface and dry with towel. (Never leave a knife in soapy water in the sink.)</p>	4. Knife is clean and safe to use on food.

SQ1--CHEF'S SALAD
PROCEDURE CHART 1B

1B--CLEANING AND TRIMMING FRESH PRODUCE (VEGETABLES & FRUIT)

WHAT	HOW	RESULTS
1. Culling produce	Before storing produce, examine each item. Remove unusable portions, such as wilted outer leaves, and any rotten items. (Check stored produce periodically and cull again, as needed)	1. Only usable produce is kept for use in preparing food products.
2. Clean, trim, & pare such produce as <u>carrots</u> , <u>potatoes</u> , and <u>cucumbers</u>	<p>a. Wash the item in clean, cold tap water. Rub dirt off with hands or, if vegetable brush is available, scrub with brush.</p> <p>b. Examine the item carefully. Look for bruised spots, soft spots and, on potatoes, "eyes". Use a vegetable peeler to remove "eyes". Use a paring knife to remove "bad" spots. Hold item firmly in one hand. Insert knife about 1/4 inch. Rotate the vegetable, not the knife, to cut out the "bad" spot. (Do this over a tray so scraps for garbage will collect on the tray, rather than fall all over the table or floor. <u>Never trim vegetables or any other food item over a garbage can.</u>)</p> <p>c. Trim and pare the item.</p> <p>(1) Carrot--Hold carrot firmly on cutting board. Use paring knife to cut 1/4" off one end of the carrot and then the other end. Hold the carrot over the scrap tray. Use the vegetable peeler to remove the skin from one-half of the carrot. Then, hold the pared half and use the vegetable peeler to pare the skin off the rest of the carrot. After carrot is pared, place it in a container of clean, cold tap water.</p> <p>(2) Potato--Hold potato firmly in one hand over the scrap tray. Use the vegetable peeler to pare all the skin off the potato. Place the pared potato in a container of clean, cold water.</p> <p>(3) Cucumber--Hold the cucumber firmly in one hand over the scrap tray. Use the vegetable peeler to pare all the skin off the cucumber. Place the pared cucumber in a container of clean, cold water.</p> <p>NOTE: A paring knife may be used instead of a vegetable peeler if none is available.</p>	2. The produce item is clean, free of bad spots, and all of the skin is pared off.

1B--CLEANING AND TRIMMING FRESH PRODUCE (VEGETABLES & FRUIT)
(CONT'D)

WHAT	HOW	RESULTS
3. Clean & trim such produce as lettuce, cabbage, celery, etc. (green, leafy vegetables)	<p><u>a. CABBAGE OR LETTUCE.</u></p> <p>(1) Hold head (of cabbage or lettuce) over scrap tray. Pull off and discard any tough or wilted outside leaves.</p> <p>(2) Wash thoroughly in clean, cold water (or under cold, running tap water) to remove all dirt, grit, etc. Shake off excess water.</p> <p>(3) Examine head carefully for brown spots. Cut brown spots off with paring knife or tear them off with fingers.</p> <p>(4) Cut off stem. Hold head firmly in one hand over scrap tray. Insert paring knife beside stem. Rotate head to cut off stem. Or, lay head on cutting board with stem to one side. Hold head firmly. Use paring knife, with sawing motion, to cut stem off.</p> <p>(5) Place clean, trimmed head in container of clean, cold water.</p> <p><u>b. CELERY.</u></p> <p>(1) Hold bunch of celery over scrap tray. Pull off and discard leaves.</p> <p>(2) Cut off stem. Hold bunch firmly on cutting board with stem to one side. Use paring knife to cut entire stem off so each stalk is separate.</p> <p>(3) Wash stalk in clean, cold water. Examine for brown spots. Cut brown spots off with paring knife (over scrap tray).</p> <p>(4) Put each clean, trimmed stalk into a container of clean, cold water.</p>	3. The produce item is clean, free of bad spots and tough or wilted leaves, and the stem is removed.

SQ1--CHEF'S SALAD
PROCEDURE CHART 18

18--CLEANING AND TRIMMING FRESH PRODUCE (VEGETABLES & FRUIT)
(CONT'D)

WHAT	HOW	RESULTS
<p>4. Clean, trim, and core such produce as <u>bell pepper</u>, and <u>tomato</u></p>	<p>a. <u>BELL PEPPER.</u></p> <p>(1) Wash papper in clean, cold water.</p> <p>(2) Examine for bad spots. Hold pepper over scrap tray. Cut bad spots out with paring knife.</p> <p>(3) Set pepper on cutting board with stem up. Hold pepper firmly in on hand. Insert paring knife about 1/2" from stem. Rotate pepper and continue to cut around the stem with the paring knife. When the circular cut is completed, set knife down flat. Hold pepper over scrap tray. Pull out cut stem, pulling seeds along with it. Run fingers along inside surface of the pepper, loosening all the white, soft membranes and any other seeds. Shake out over scrap tray and, if necessary, rinse out insides.</p> <p>(4) Place clean, cored pepper into container of clean, cold water.</p> <p>b. <u>APPLE.</u></p> <p>(1) Wash apple in clean, cold water.</p> <p>(2) Examine for bad spots. Hold apple over scrap tray. Cut bad spots out with paring knife. Pull out stem.</p> <p>(3) Set apple down on cutting board, stem side up. Use paring knife (or cook's knife) to cut apple in half, cutting down through hollow of stem.</p> <p>(4) Core one-half of apple at a time. Place half on cutting board, cut side up. Make a slanted incision with paring knife on one side of the apple core. Cut diagonally until under the core. Make the same line of cut on the other side of the core. Lift core out. Repeat for the other half of the apple.</p> <p>(5) If apple is to be pared, use same procedures as for paring other produce. (See #2 above.)</p> <p>(5) Place clean, cored apples in water containing lemon juice or vinegar to avoid oxidizing.</p>	<p>3. Produce item is clean, free of bad spots, and the stem section is removed. In some, such as the bell papper and apple, the section containing the seeds (the core) is also removed.</p>

18--CLEANING AND TRIMMING FRESH PRODUCE (VEGETABLES & FRUIT)
(CONT'D)

WHAT	HOW	RESULTS
	<p>c. <u>TOMATO.</u></p> <ol style="list-style-type: none"> (1) Wash tomato in clean, cold water. (2) Examine tomato carefully for bad spots. Hold tomato over scrap tray. Use paring knife to remove bad spots. (3) Set tomato on cutting board, stem side up. Insert paring knife near stem. Turn tomato over. Repeat the procedure to cut out any dark place at the bottom. (4) Place clean, cored tomato on paper towel or on tray. Do <u>not</u> place tomatoes into water. 	

SQ1--CHEF'S SALAD
PROCEDURE CHART 3C

TEARING, SHREDDING, DICING, CHOPPING, MINCING, SLICING, WEDGING, STRIPPING

HOW

RESULTS

<p>lettuce</p>	<p>a. Remove lettuce from water. Shake off excess water. b. Slam lettuce, stem side down, on cutting board to loosen leaves. Pull leaves apart. c. Pick up some leaves in one hand and bunch together. Hold over clean container. With other hand, tear off "bite-size" pieces of lettuce and drop them into the container.</p>	<p>1. Lettuce leaves are torn into "bite-size" pieces, none larger than can easily be picked up with a fork and put into the mouth.</p>
<p>Shred, e.g., cabbage, lettuce, etc.</p>	<p>a. Hold cabbage firmly on cutting board, stem side up. Use cook's knife to cut the head of cabbage in half. Place the knife on center of stem. Place other hand over the top of the knife blade, holding both sides of the cabbage with the fingers. Press downward and forward on knife to cut the cabbage into two equal halves. b. Use the paring knife to core the stem out of each half. Make a slanted cut on each side of the stem and lift the stem out. Discard core on scrap tray. c. Place cabbage half on cutting board, cut side down. Hold cabbage firmly with one hand, fingers curled into a "claw". Hold cook's knife firmly in other hand. Place cutting edge of knife about 1/16" from edge of cabbage. Look over knife to what is to be cut. Use a downward and forward motion to cut cabbage into very fine shreds. (If coarser cut is needed, such as for soups, etc., make shreds a little wider, about 1/8".) Continue shredding until the desired amount is cut. After cutting, separate shreds with fingers.</p>	<p>2. Food item is cut into long, thin shreds, all of about the same width (fine cut, 1/16" or less; coarse cut, about 1/8").</p>
<p>3. Dice, e.g., celery, green (bell) pepper, apple, cheese, meat, etc.</p>	<p>a. Place e.g., celery stalk on cutting board. Hold celery with fingers of one hand and place cook's knife so 1/4" wide strips can be cut. Look over knife and cut as many 1/4" wide strips as possible. (Move fingers back as each strip is cut off.) b. Hold strips together on cutting board so all ends are even. Place cook's knife 1/4" from ends with toe of blade down. Press down on knife with slight forward motion. Continue cutting through strips, about 1/4" back each time. (Move fingers back as cuts are made, but keep strips held together.)</p>	<p>3. Food item is cut into 1/4" cubes, all about the same size.</p>

SQ1--CHEF'S SALAD
PROCEDURE CHART 1C

1C--TEARING, SHREDDING, DICING, CHOPPING, MINCING, SLICING, WEDGING, STRIPPING (CONT'D)

WHAT	HOW	RESULTS
4. Chop, e.g., celery, green pepper, onion, etc.	<p>a. Item to be chopped should already be in small pieces (they may have been diced first).</p> <p>b. Push pieces together on the cutting board. Hold the cook's knife by the handle in one hand over the pieces. Place the fingers of the other hand lightly on top of the blade of the knife. Place the toe of the knife on the cutting board and lift the heel. Press down with a slight forward motion. Repeat this "toe-heel", rocking back and forth, to cut the pieces into smaller pieces.</p>	4. Food item is cut into pieces that are smaller than 1/4" and are not all the same size or shape.
5. Mince, e.g., celery, green pepper, onion, etc.	Continue the chopping procedure as described in #4 above until pieces are very tiny.	5. Food item is cut into very tiny pieces.
6. Slice, e.g., cucumber, tomato, potato, apple, meat, cheese, egg, etc.	<p>a. Hold the item, e.g., cucumber, down on the cutting board, using the "claw" hold.</p> <p>b. Place the cook's knife on the cucumber as far from the edge as the desired width of the slice. Look over the blade to watch the slices, but remember to be mindful of your fingers behind the blade. Keep the toe of blade slightly down. Press down and slightly forward to cut slice. Repeat for each slice.</p> <p>NOTE: For thin slices, use the same procedure, but use the paring knife, which has a thinner blade.</p>	6. Food item is cut into the desired number of slices, each of the same width and evenly cut.
7. Wedge, e.g., tomato, hard-cooked egg, apple, etc.	<p>a. Hold the item, e.g., tomato, on the cutting board, stem side down.</p> <p>b. Place the cook's knife over the center, top of the tomato. Place the other hand over the top of the knife, holding the tomato on each side with the fingers. Press down with a forward, downward motion to cut the tomato in half.</p> <p>c. Use the same procedure as above to cut each tomato half in half (four wedges).</p> <p>d. Repeat the procedure to cut each of the four tomato wedges in half (eight wedges).</p>	7. Food item is cut into equal-size wedges, the same width at the wide edge and sides slanted up to a sharp edge.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

DIRECTIONS FOR CONFIRMATION TASK--RECIPE CONVERSION

At this time, the task you will be doing is designed to find out how well you have learned to convert recipes. This review is to tell us whether or not you are able to convert the quantity of any ingredient given on a recipe card to a number of portions greater than or less than 100. Doing this now will tell us what additional help you may still need to do this task quickly and accurately.

1. You will be given the following materials:
 - a. Two recipe cards
 - b. Two recipe conversion work sheets.
2. You will convert one recipe at a time. You will do each of them the same way.
 - a. Copy the weight and measure of each ingredient (for 100 portions) from the recipe card to the work sheet (columns B and C).
 - b. Use the work space (column F) to work out the conversion of the weight and measure of each ingredient.
 - c. Write in the converted weight and measure of each ingredient (for the new number of portions) (Columns D and E).
3. Be sure to put your name and number in the space provided at the top of the work sheet.
4. You will have a maximum of 40 minutes to do both recipe conversions. Since your results will be judged for both accuracy and the amount of time needed, work as quickly as you can, but take the time to check because accuracy will count more than speed.
5. You are not to ask anyone for help. Do the best you can on your own.
6. If any part of these directions are unclear, get them answered BEFORE you start.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST
CONFIRMATION TASK RATING SHEET--RECIPE CONVERSION

STUDENT'S NAME/NO: _____

RATER: _____ DATE: _____

Use the rating scale below to rate BOTH recipe conversions TOGETHER. Write remarks in space labeled REMARKS.

CRITERION NO. 1:

- 0 = Not done, illegible,
or more than 6 errors
- 2 = 5-6 errors
- 4 = 3-4 errors
- 6 = 1-2 errors
- 8 = 0 errors

CRITERION NO. 2:

- 0 = DID NOT complete or took more than 35 minutes
- 1 = Took between 30-35 minutes
- 2 = Took between 25-30 minutes
- 3 = Took between 20-25 minutes
- 4 = Took less than 20 minutes

CRITERIA--RECIPE CONVERSION	RATING					REMARKS
<u>CRITERION NO. 1</u> --The amount of each ingredient for both conversions was accurate and legible for the given number of people.	0	2	4	6	8	
<u>CRITERION NO. 2</u> --Both conversions were completed within the time allowed.	0	1	2	3	4	

ADVANCED INDIVIDUAL TRAINING 94B10 TEST
 RECIPE CONVERSION WORK SHEET

STUDENT'S NAME/NO: _____

RATER: _____

RECIPE FOR: _____

TO BE CONVERTED TO: _____

PORTIONS _____

INGREDIENTS	RECIPE WEIGHTS FOR 100 PORTIONS	RECIPE MEASURES FOR 100 PORTIONS	WEIGHTS CONVERTED TO PORTIONS	MEASURES CONVERTED TO PORTIONS	WORK SPACE
(a)	(b)	(c)	(d)	(e)	(f)

O. SAUCES, GRAVIES, AND DRESSINGS No. 16(1)
BROWN GRAVY

YIELD: 6 Portions				EACH PORTION: 1/3 Cup
PAN SIZE:				
INGREDIENTS	WEIGHTS	MEASURES		METHOD
Meat drippings and clear fat or shortening		2 Tbsp ...	.....	1. Sprinkle flour evenly over drippings and fat in bottom of pan. Use brown particles remaining in pan. 2. Cook over low heat on top of range or in 375°F. oven 30 minutes until flour is a rich brown color. Stir frequently to avoid over-browning.
Flour, wheat, general purpose, sifted		4 Tbsp ...	.....
Stock, hot	
Salt	
Pepper, black	

ADVANCED INDIVIDUAL TRAINING 94B10 TEST
RECIPE CONVERSION WORK SHEET

STUDENT'S NAME/NO: _____ RATER: _____
 RECIPE FOR: PLAIN OMELET (F-8(1)) TO BE CONVERTED TO: _____ PORTIONS

INGREDIENTS	RECIPE WEIGHTS FOR 100 PORTIONS	RECIPE MEASURES FOR 100 PORTIONS	WEIGHTS CONVERTED TO PORTIONS	MEASURES CONVERTED TO PORTIONS	WORK SPACE
(a)	(b)	(c)	(d)	(e)	(f)
Eggs, whole.....					
Salt.....					
Pepper, black.....					
Shortening, melted or salad oil...					

PLAIN OMELET

YIELD 100 Portions (2½ Gallons)

EACH PORTION: 1 Omelet

TEMPERATURE: 325°F. Griddle

INGREDIENTS	WEIGHTS	MEASURES		METHOD
Eggs, whole	20 lb	2½ gal (200 eggs)	.....	1. Place shelled eggs in mixer bowl. Using wire whip, beat just enough to blend yolks and whites.
Salt	3 oz	4⅔ tbsp .	.....	2. Add salt and pepper; mix thoroughly.
Pepper, black .....	.....	2 tsp .....	.....
Shortening, melted or salad oil	1 lb	2 cups ...	.....	3. Pour ½ cup (1-3 oz ladle) egg mixture for individual omelets on greased griddle. 4. Cook until bottom is golden brown. DO NOT STIR. If necessary, gently lift cooked portion with a spatula to permit uncooked mixture to flow underneath. Continue cooking until eggs are set.

(OVER)

INGREDIENTS	WEIGHTS	MEASURES		METHOD
				5. Fold omelet in half or into thirds making a long oval shaped omelet. Serve immediately or place in a hot steam table pan.

NOTE: 1. In Step 1, 6 lb 4 oz (5-No. 3 cyl cn) canned, dehydrated egg mix combined with 7½ qt warm water may be substituted for whole eggs. In Step 2, omit salt. See Recipe Card A-8.

2. To offer assorted omelets, prepare ingredients for desired Variations. Set up ingredients in individual containers and place near griddle.

VARIATIONS

- BACON OMELET:** Fry 5 lb (3¾ qt) chopped bacon until crisp; drain thoroughly. Follow Steps 1 through 3. In Step 4, sprinkle about 1 tbsp bacon over eggs when partially set. Follow Step 5.
- BAUERNFRUESTUECK (FARMER'S BREAKFAST):** Sauté about 8 lb (1½ gal) cooked, diced potatoes (9 lb 4 oz A.P.), 4 lb (3 qt) chopped, canned ham, and about 1 lb (3 cups) chopped onions (1 lb 2 oz A.P.) in 1 lb 12 oz (3 cups) butter or margarine. Add 2 oz (1 cup) chopped parsley, 1½ oz (2 tbsp) salt, and 2 tsp black pepper. Follow Steps 1 through 3. In Step 4, sprinkle ¼ cup (1-No. 16 Scoop) mixture over eggs when partially set. Follow Step 5.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

RECIPE CONVERSION WORK SHEET

STUDENT'S NAME/NO: _____

RATER: _____

RECIPE FOR: BAKING POWDER BISCUITS (D-I(2)) TO BE CONVERTED TO: _____ PORTIONS

INGREDIENTS	RECIPE WEIGHTS FOR 100 PORTIONS	RECIPE MEASURES FOR 100 PORTIONS	WEIGHTS CONVERTED TO PORTIONS	MEASURES CONVERTED TO PORTIONS	WORK SPACE
(a)	(b)	(c)	(d)	(e)	(f)
Flour, wheat, general-purpose, sifted.....					
Milk, nonfat, dry.....					
Baking powder.....					
Salt.....					
Shortening.....					
Water.....					

BAKING POWDER BISCUITS**YIELD:** 100 Portions (4 Pans)**EACH PORTION:** 2 Biscuits**PAN SIZE:** 18 by 26-inch Sheet Pan**TEMPERATURE:** 450°F. Oven

PER- CENT	INGREDIENTS	WEIGHTS	MEASURES		METHOD
50.66	Flour, wheat, general purpose, sifted	12 lb	3 gal ....	.....	1. Sift together flour, milk, baking powder, and salt into mixer bowl.
3.43	Milk, nonfat, dry	13 oz	2 $\frac{7}{8}$ cups .	.....
2.64	Baking powder .	10 oz	1 $\frac{1}{2}$ cups .	.....
1.06	Salt	4 oz	6 tbsp ...	.....
10.55	Shortening	2 lb 8 oz .	5 $\frac{3}{4}$ cups .	.....	2. Blend shortening at low speed into dry ingredients until mixture resembles coarse cornmeal.

(OVER)

PER CENT	INGREDIENTS	WEIGHTS	MEASURES		METHOD
31.66	Water	7 lb 8 oz .	3 $\frac{3}{4}$ qt ...	.....	3. Add water; mix at low speed only enough to form a soft dough.
100.00		23 lb 11 oz			4. Place dough on lightly floured board. Knead lightly, approximately 1 minute or until dough is smooth. 5. Roll or pat out to a uniform thickness of $\frac{1}{2}$ inch. 6. Cut with 2 $\frac{1}{2}$ -inch floured biscuit cutter. Place biscuits on pans in rows 6 by 9. 7. Bake 15 minutes or until lightly browned.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST

DIRECTIONS FOR CONFIRMATION TASKS--OPERATING/MAINTAINING EQUIPMENT

Today, you will be checked on how well you can inspect, operate, and clean certain equipment you will be using in a dining facility. You have already learned about this equipment during the Garrison Equipment Phase of your training. None of the equipment should be unfamiliar to you if you paid attention during your training.

An instructor will observe you as you work with each piece of equipment and rate your performance. This review task will make it possible for instructors to help you improve your ability to use the equipment properly so you can function better in a dining facility.

You are to report to Station # _____. An instructor will be there to meet you and tell you what you are to do. He will also be asking you certain questions so you can explain what you are doing and why. Everything you will need to work with, the equipment will be at the Station.

ADVANCED INDIVIDUAL TRAINING 94B10 TEST
CONFIRMATION TASK RATING SHEET--GARRISON EQUIPMENT

STUDENT'S NAME/NO: _____ RATER: _____
EQUIPMENT ITEM: _____ DATE: _____

Use the rating scale below to rate each listed criterion. Refer to Rater's reference sheet - procedure chart for explanation of the procedure. Write remarks in the column labeled REMARKS.

0 = Did not do, 1 = Did but not minimally acceptable, 2 = Did at MALP

3 = Did above MALP but not to desired level (DLP), 4 = Did at DLP for given conditions.

CRITERIA	RATING					REMARKS
<u>Criterion #1</u> --Checked equipment before starting to operate it.	0	1	2	3	4	
<u>Criterion #2</u> --Explained purpose for checking.	0	1	2	3	4	
<u>Criterion #3</u> --Observed all necessary safety precautions before operating.	0	1	2	3	4	
<u>Criterion #4</u> --Explained importance of safety precautions.	0	1	2	3	4	
<u>Criterion #5</u> --Took the proper actions to start the equipment.	0	1	2	3	4	
<u>Criterion #6</u> --Took the proper actions to operate the equipment.	0	1	2	3	4	
<u>Criterion #7</u> --Explained starting and operating procedures.	0	1	2	3	4	
<u>Criterion #8</u> --Took the proper actions to stop the operation.	0	1	2	3	4	
<u>Criterion #9</u> --Explained procedure for stopping the operation.	0	1	2	3	4	
<u>Criterion #10</u> --Took proper actions to disassemble equipment for cleaning.	0	1	2	3	4	
<u>Criterion #11</u> --Explained disassembling Procedure.	0	1	2	3	4	
<u>Criterion #12</u> --Took proper actions to clean equipment.	0	1	2	3	4	
<u>Criterion #13</u> --Explained cleaning procedure.	0	1	2	3	4	
<u>Criterion #14</u> --Took proper actions to assemble equipment.	0	1	2	3	4	
<u>Criterion #15</u> --Explained assembling procedure.	0	1	2	3	4	

QUESTION SEQUENCE FOR GARRISON EQUIPMENT

When student reports to the Rater to demonstrate his/her knowledge of the piece of equipment, the Rater should use the following sequence of questions:

1. What is this (point to equipment) called?
2. What is its function in the dining facility?
3. What are its main parts?
4. (For each part named) What is its purpose?
5. In using the _____ (Equipment) _____, what would you do first?
6. Why would you _____ it first?
7. What should the result be if _____ it properly?
(Student does what he/she indicated)
8. What would you do next in using the _____?
9. Why would that be the next thing you would do?
10. What should the result be if you _____ it properly?
(Student does what he/she indicated)

RECYCLE FOR ALL STEPS IN OPERATION AND MAINTENANCE

MILK DISPENSERS

NAME OF EQUIPMENT	WHERE FOUND & USED	WHEN - WHY USED
Milk Dispenser	Unit is placed on self-service beverage table in serving area	Allows persons to get own glasses of milk filled, and refilled. Unit does not require personnel to serve. Bulk milk is less expensive than carton milk.
BRIEF DESCRIPTION		
The bulk milk dispenser is a mechanically refrigerated storing and dispensing cabinet for milk is an upright, rectangular cabinet mounted on four legs. The interior and exterior of the milk dispenser are stainless steel and the corners of the interior are rounded for easy cleaning. The cabinet is cooled by a self-lubricating compressor unit that maintains temperature between 35-38° F. The cabinet accommodates three 5 or 6 gallons of milk in either plastic or cardboard containers.		

PARTS OF THE EQUIPMENT - CONTROLS

NAME OF PART	APPEARANCE OF PART	USE OF PART IN THE EQUIPMENT
1. Temperature Regulator	Rectangular, about 3X4 with a movable round disc in the middle. Mounted on the left side of the cabinet.	Controls temperature of the interior
2. Dispensing Levers	Three levers, stainless steel, can be removed from unit, each lever is one piece. Weight on one end, base plate on other end, bar in the middle connecting both sides.	The upper bar of the lever fits into niches on either side of the plastic dispensing well and acts as a pivot point for the lever. The milk container dispensing tube passes thru an opening in the lever plate. In the closed position, the weight end blocks the flow of milk by exerting pressure on the tube. Milk flows freely when handle is raised.

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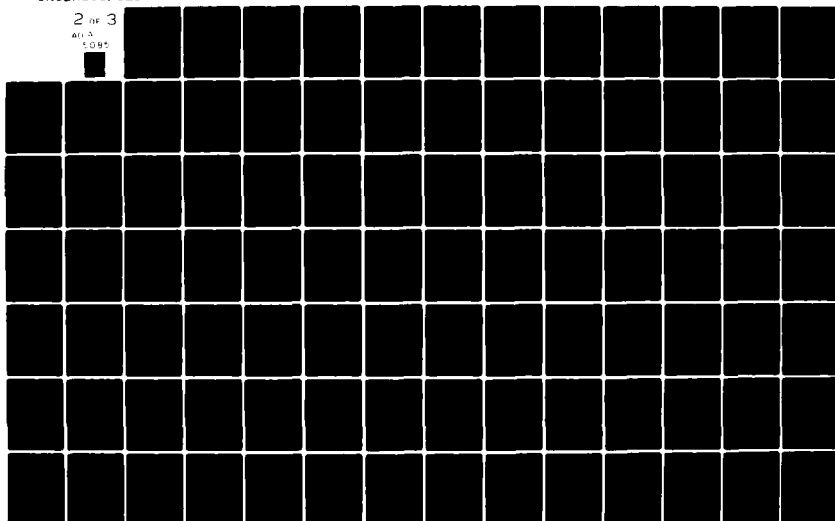
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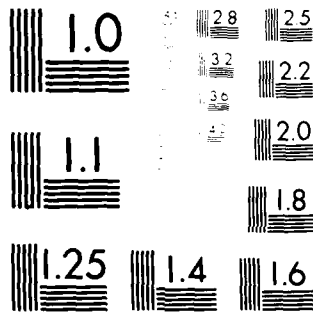
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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

FILLING AND CLEANING THE MILK DISPENSER

WHAT	HOW	RESULTS
1. Inspect Unit	<ol style="list-style-type: none"> 1. Insure unit is clean. 2. Insure all parts are there. 3. Assemble unit 4. Plug in unit 	1. Milk dispenser is clean and ready for loading.
2. Loading	<ol style="list-style-type: none"> 1. Carefully pull out the plastic wrapped tube. Gently remove plastic wrapping covering the tube. <u>NOTE:</u> Pulling too hard may remove tube from bag nipple causing the milk to spill out. 2. Open dispenser door, remove lever from dispensing tube well. 3. Carefully place milk carton in the dispenser positioning it so that the dispensing tube extends into the tube well. 4. Holding the lever by its handle, slip the lever up over the tube, feed the tube through the opening of the lever plate. 5. Continue to slide the lever up over the tube until the ends of the lever top bar rest in the niches on either side of the tube well. 6. Cut the tube 1/4 inch below the base plate and wipe the small amount of milk spills when the tube is cut. 	2. Milk dispenser is now ready for use.
3. Removing empty Carton	<ol style="list-style-type: none"> 1. Open cabinet door. Lift the lever to disengage it from the niches in the dispensing tube well; then slide lever off the dispensing tube. 2. Remove the empty carton. 	3. Ready for reloading
4. Removing partially cull carton. <u>NOTE:</u> Milk should be removed only when defrosting or mechanical failure.	<ol style="list-style-type: none"> 1. Open door, pinch the dispensing tube above the lever and gently slide the tines of a fork over the tube. Clamp between two tines. 2. Lift lever, remove from tube. 3. Lift carton out of the dispenser and turn it so that the tube is facing upward. Place in refrigerator. 	4. Unit now ready for cleaning.

OPERATOR MAINTENANCE

CLEANING	HOW	RESULTS
1. After each meal	<p>a. Remove drip pan under dispenser tubes. Wash with a hot detergent solution, rinse with clear hot water and air dry.</p> <p>b. Wash the exterior surfaces of the milk dispenser with a disposable cloth dampened in hot detergent solution. Rinse with cloth dampened in hot clear water and dry with clean dry cloth. Replace drip pan.</p>	Dispenser ready for reuse.
2. Twice weekly	a. Twice a week or as required, clean the outside of the cabinet with an approved stainless steel cleaner.	Polished unit.
3. Defrosting	<p>a. Unplug unit and open door.</p> <p>b. When the frost has melted, wash the interior, inside of door and door gasket with a warm detergent solution. Rinse with clear warm water mixed with a small amount of Baking Soda. Dry with clean disposable cloth. Wash levers in hot detergent solution; rinse in clear hot water and air dry.</p> <p>c. Assemble, close door, plug unit in. When cooled to 38°, unit is now ready for loading.</p>	Dispenser is cleaned and ready for reuse.
4. Safety.	a. Always keep door closed except when loading or defrosting.	4. Remove partially filled carton only when necessary.
a. When washing exterior. Be careful not to wet the electrical cord.		

INSPECTING, LOADING/OPERATING, CLEANING BULK MILK DISPENSER

STEP	WHAT	HOW	RESULTS
1.	<u>PRE-OPERATIONAL CHECK</u> Inspect the bulk dispenser to make sure it is clean, operational, and safe to use.	<p>a. Make sure machine is unplugged.</p> <p>b. Check electrical cord and outlet for damage or unsafe conditions.</p> <p>c. Check gasket on door on the front of the cabinet to be sure it fits tight, regulator is clear and unbroken.</p> <p>d. Check to make sure levers and drip pan are present and undamaged.</p> <p>e. Check to make sure inside of cabinet, levers, and <u>drip pan</u> are clean.</p> <p>f. If machine is damaged, unsafe to use, or parts are missing, notify the person in charge. If any part needs cleaning, use the procedures described in #3 below.</p>	1. Bulk milk dispenser is clean and safe to use or the proper person has been notified.
2.	<u>LOADING/OPERATION</u>	<p>a. Assemble unit. Install levers, drip pan, etc. Shut door tightly. Plug unit in. Set temperature regulator to 38° and allow to cool down for 45 minutes to 1 hour.</p> <p>b. Obtain three 6-gallon cartons of milk from the walk-in refrigerator. Carefully pull out plastic-wrapped white tubes and gently remove plastic covering.</p> <p>c. Open dispenser door. Carefully place each milk carton in the dispenser, bottom up and white dispensing tube extending into the tube well.</p> <p>d. Hold lever by the handle. Slip lever over tube and feed the tube through the opening. Continue sliding the lever up over the tube until the lever rests in the niches on the sides of the tube well. Cut the tube with a sharp paring knife about 1/4" below the base plate. Repeat for other two cartons. Wipe up any spills that occurred when tube was cut.</p> <p>e. To remove any empty carton, open the cabinet door. Lift the lever and slide it off the tube. Remove the empty carton.</p> <p>f. To remove a partially full carton, open the cabinet door. Pinch the dispensing tube above the lever and gently slide it between the tines of a fork to keep it pinched. Lift lever, remove from tube, lift carton out and turn it over so the pinched-off tube is on top. Place carton in refrigerator.</p>	2. Patrons have been able to obtain servings of milk from the bulk milk dispenser, no one is hurt, and the machine is undamaged.

INSPECTING, LOADING/OPERATING, CLEANING BULK MILK DISPENSER (CONT'D)

STEP	WHAT	HOW	RESULTS
3.	<p><u>CLEANING.</u> Clean the bulk milk dispenser periodically during use, after each meal, and twice weekly. Defrost when ice has accumulated to 1/4" thick.</p>	<p>a. <u>During use and after each meal:</u> (1) Remove drip pan. Wash in hot detergent solution, rinse well in (2) Wash the outside of the dispenser with a disposable cloth dampened in hot detergent solution. Rinse with cloth dampened in hot clear water. Wipe with clean dry cloth. NOTE: Do not wet the electrical cord. (3) Replace clean drip pan.</p> <p>b. <u>Twice Weekly:</u> Clean the outside of the cabinet with an approved stainless steel cleaner.</p> <p>c. <u>Defrosting:</u> (1) Unplug unit and open door. Allow frost to melt. (2) Wash insides of cabinet, inside of door and door gasket with a warm detergent solution. Rinse with clear warm water mixed with a little baking soda. Dry with a clean disposable cloth. (3) Wash levers in hot detergent solution, rinse in clear hot water, and air dry. (4) Assemble, close door, plug unit in, and cook to 38°.</p>	<p>3. Bulk milk dispenser is clean and ready for use, no one is hurt, and the machine is undamaged.</p>

HOBART MIXING MACHINE

NAME OF EQUIPMENT	WHERE FOUND AND USED	WHY USED
Mixing Machine	Is used and found in all Army Dining Facility kitchens.	This machine is used for mixing food products with various attachments for different desired results.

* Tell students why

Brief Description: The mixing machine has a motor driven shaft to which various accessories are attached to mix, beat, whip, or blend. The power of the electric motor is transmitted to the shaft by V-belts through a gear train. The mixer speeds may be controlled by a gear shift level or a speed selector. We will be working with this particular model that has a speed selector. The bowl of this small mixer is raised and lowered by a lever.

PARTS OF THE EQUIPMENT - ACCESSORIES AND CONTROLS

NAME OF PART	APPEARANCE OF PART	USE OF PART IN THE EQUIPMENT
<u>ACCESSORIES</u>		
1. Beater	1. Looks like an arrowhead. 2. Has spokes in between, iron alloy. 3. Hole on the top. 4. Hooks on to something. 5. One side has a stem sticking up.	The beater is used for mashing potatoes, creaming, reconstitution, meat loaf, casseroles, batters, sauces, and icings. Always start at low speed so as not to bruise the food and then increase as necessary.
2. Wire Whip	1. Looks like a bulb. 2. Stainless Steel. 3. Wired. 4. Spacings in between. 5. Connected to a solid base.	Used primarily to pump air into such foods as egg whites, icings, meringues, sauce, and dressings.
3. Pastry Knife	1. Unorthodox arrowhead. 2. Open in the middle. 3. Cutting edge on opposite sides. 4. Attached to base.	Used for combining flour and shortening. Examples are pie doughs and biscuits.
4. Dough Hook	1. Hook shaped. 2. Top shaped like a ball.	It is designed for mixing bread and roll doughs that require folding, rolling, kneading, and stretching action for best development. Such as yeast products, doughnuts, cinnamon rolls, hot rolls, bread.

PARTS OF THE EQUIPMENT - ACCESSORIES AND CONTROLS (CONT)

<u>NAME OF PART</u>	<u>APPEARANCE OF PART</u>	<u>USE OF PART IN THE EQUIPMENT</u>
<u>CONTROLS</u>		
1. Starter Switch	1. Mounted on the left side of the motor head on a rectangular base with a small black switch protruding from it. 2. Shows words OFF - ON.	The starter switch is used to start and stop the motor of the mixing machine.
2. Lift Lever	1. Looks like an L-shape lever and has an elbow curve on top and bottom.	Used to lift and lower bowl support.
3. Bowl Support Stop	1. Protruding wedge.	Used to stop the upward movement of the bowl at the proper point.
4. Speed Selector	1. Numbered 1 to 3. 2. Has a stainless steel handle.	Used to regulate or control speed on the machine.

1. Preoperational Checks	Check electrical cord and plug. Have bowl and attachment needed for product to be made. If cord is bad, contact supervisor. It is now ready for use.
2. Operation	<ul style="list-style-type: none">a. Position the desired accessory on the accessory drive shaft.b. Place an empty bowl on the bowl support and raise the bowl into operating position.c. Check the adjustment of the bowl support stop. Clearance between the accessory and bowl bottom should be $\frac{1}{8}$ inch. Do not operate the mixing machine with less than $\frac{3}{16}$ of an inch clearance between accessory and bowl because the accessory may be damaged or the bottom of the bowl worn away.d. Lower bowl to bottom position. Fill bowl with desired ingredients. Use the correct accessory for the product: For example, use the beater to mash potatoes. Never use the wire whip. Raise the bowl.e. Set mixing machine on low speed then turn off.f. Operate the machine at low speed until the ingredients are blended and then set the speed as indicated in the recipe. Starting the mixing operation in low speed prevents ingredients from being thrown out of the bowl.g. Turn the switch to stop after the mixing motion has stopped. Lower the bowl. Remove the accessory from the shaft. Scrape food products out of bowl and off the accessory, into a separate pan. Set bowl and accessory off to a side to be cleaned.
3. Cleaning	<ul style="list-style-type: none">a. Wash the bowl and accessories with a hot detergent solution. Rinse with hot clear water, and allow to air-dry.b. Clean the exterior surfaces of the mixer with a damp cloth and dry them with a clean, dry cloth.

SAFETY AND CARE

SAFETY

1. Never put hands or spoon or spatula into the bowl while the mixer is operating. Failure to heed this precaution may result in severe damage to the machine and very serious injury to the operator.
2. Do not operate attachments with the motor in a speed higher than second unless the manufacturer specifies a higher speed.
3. If the mixing machine does not function properly or if there is a sign of shorting or burning, stop the machine, unplug it, and notify the person in charge immediately.

CARE

1. Handle the mixer bowls and accessories carefully.
2. Do not drag bowls across floors-dented bowls may bend or damage the accessories.
3. Hang accessories out of danger immediately after washing. Bent accessories may damage the mixing machine.

Inspecting, Operating, and Cleaning the Hobart Mixer and Accessories

P	WHAT	HOW	RESULTS
1	Preoperational Check Inspect the mixer, bowl, and accessories to be used to make sure they are clean and safe to use.	a. Make sure mixer is unplugged. b. Check the electrical cord and outlet for damage or unsafe condition. c. Check the mixer base, controls, lever, and the bowl and accessories to be used. Note any dents, damage, missing parts, grease, or dirt. If anything is damaged or missing, notify the person in charge. If anything needs cleaning, use the procedures described in #3 below.	1. Mixer, bowl, and accessories are clean and safe to use or the proper person has been notified.
2	Operation Use the mixer for the required purpose.	a. Check position of bowl and accessory. <ol style="list-style-type: none"> 1. Make sure <u>lift lever</u> is down. 2. Position the accessory to be used on the <u>accessory drive shaft</u> and lock into place. 3. Place empty bowl on the <u>bowl support</u>. Move the <u>lift lever</u> up to raise the bowl to operating position. 4. Check to see that clearance between the accessory and the bowl is no less than 3/16" (about 1/4"). If there is not enough clearance, notify the person in charge. 5. If there is enough clearance, lower bowl and remove. b. Operate Mixer <ol style="list-style-type: none"> 1. Put ingredients into bowl. Place bowl on bowl support. Raise bowl by raising lift lever. (If the accessory is not already locked onto the accessory drive shaft, place in bowl with ingredients before raising bowl. When bowl is raised to operating position, lock accessory into place on drive shaft). 2. Plug machine in. Set <u>speed selector</u> at LOW SPEED (#1). Then, switch <u>starter switch</u> to ON position. (If you detect smell of shorting or burning, turn machine off immediately, unplug, and notify person in charge). 3. Allow ingredients to mix at LOW SPEED until they are blended. Then, move speed selector to the speed indicated on the recipe card (usually not higher than #2). 	2. Mixer is used for the required purpose; no one is hurt; and the machine, bowl, and accessory are undamaged.

STEP	WHAT	HOW	RESULTS
2 (ONT)		<ol style="list-style-type: none"> 4. Never put hands, spoon, spatula, or anything into the bowl while the mixer is operating. 5. When ingredients have mixed for the required time, turn speed to LOW position and turn switch to OFF. Wait for mixing motion to stop completely. 6. Lower the bowl with lift lever and remove. Remove accessory from drive shaft. Use rubber spatula to scrape food from accessory into bowl. Remove mixed food from mixer bowl to a clean container. Set mixer bowl and accessory aside for cleaning. 	
3	Cleaning Clean mixer, bowl and accessory after each use.	<ol style="list-style-type: none"> a. Make sure mixer is unplugged. b. Wash mixer bowl and accessories in hot detergent solution. Rinse well with clear hot water and allow to air dry. c. Clean the exterior of the mixer with a clean damp cloth. Dry with a clean dry cloth. d. Place and store mixer bowl and accessories in a place where they are not likely to fall or be bent or broken. 	3. Mixer, bowl, and accessory are clean and ready for reuse, no one is hurt, and the equipment is undamaged.

NOTE. Procedures described are for electric coffee urn which makes 2 gallons of coffee.

G/E #4

INSPECTING, OPERATING, AND CLEANING THE COFFEE URN

WHAT	HOW	RESULTS
<p>1. <u>Pre-Operational Check:</u> Inspect the coffee urn to make sure it is clean and safe to use.</p>	<p>a. Make sure coffee urn is unplugged. Check electrical cord and outlet for damage or unsafe condition.</p> <p>b. Check interior and exterior of urn, wire basket, filter to be used, buttons, etc., to make sure all are clean and undamaged. If any parts of the urn are damaged or missing, notify the person in charge. If filter is unusable, get another. If urn or parts are not clean, use the cleaning procedures described in #3 below.</p>	<p>1. Coffee urn is either clean and safe to use, or the proper person has been notified.</p>
<p>2. <u>Operation:</u> The coffee urn has been used to brew the required amount of coffee.</p>	<p>a. Push button to turn coffee urn on; turn temperature control dial to 10.</p> <p>b. Put white paper coffee filter into the wire basket. Measure the amount of coffee grounds needed (6 1/2 ounces of coffee for each gallon of water.) Put the coffee grounds into the filter and set aside until water is at the proper temperature for brewing.</p> <p>c. Check the water temperature gauge. When it reads 210°-212° F, the water is ready for brewing coffee.</p> <p>d. Lift spray arm nozzle and position in center of the wire basket. Push "brew" button. Hot water will begin spraying over the coffee grounds and the coffee will drip into the coffee liner.</p> <p>e. When water stops spraying over the coffee grounds, the light will go off. Swing the spray nozzle arm into the holding position.</p> <p>f. Wait until all the water has dripped through the coffee grounds. Carefully lift out the wire basket and discard the filter and grounds. Replace the lid on the coffee urn. Rinse wire basket with hot water and allow to air dry.</p> <p>g. Turn temperature control dial down to #5. The water temperature indicator should register 185° F., the correct serving temperature.</p>	<p>2. Coffee has been brewed and is ready for serving 15 minutes before the meal. (It should not be held longer than 1 hour.) No one has been hurt and the coffee urn is undamaged.</p>

INSPECTING, OPERATING, AND CLEANING THE COFFEE URN (CONT'D)

WHAT	HOW	RESULTS
3. <u>Cleaning and Maintenance:</u>	<p>a. <u>After Each Use:</u></p> <ol style="list-style-type: none"> 1) Be sure "on/off" button is "off", temperature control dial is at #1, and coffee urn is unplugged. 2) Drain all brewed coffee from liners after serving period and throw away. Rinse and scrub liners thoroughly with clear hot water (no detergent). Continue to run hot water through liners until water runs clear. Leave 1 gallon of clean, hot water in each liner. Rinse lid and replace on urn. <p>b. <u>At End of the Day:</u></p> <ol style="list-style-type: none"> 1) Same as "a.1) above. 2) Drain all brewed coffee and throw away. Rinse liners thoroughly with clean, hot water. Put 1/4 cup of mild detergent solutions into 2 gallons of hot water in each liner. Scrub inside of liners with long-handled brush. Rinse thoroughly with hot water, making sure all detergent is washed away. Rinse until water is drinkable. Leave 1 gallon of clean, hot water in each liner. Scrub and rinse lid with hot water and place on urn. Scrub and rinse wire basket with hot water and allow to air dry. <p>c. <u>Twice Weekly:</u></p> <ol style="list-style-type: none"> 1) Fill each liner 3/4 full of water. Add 1/4 cup of Trisodium Phosphate or 1/4 cup of mild dishwashing detergent. Turn heat on and heat for 30 minutes. 2) Turn heat off and unplug the urn. 3) Drain off cleaning solution into a separate container. Disassemble and thoroughly scrub faucet valves, shanks, gauge glass, etc. with a long, thin brush and the cleaning solution. Thoroughly rinse all parts with hot water and reassemble. 4) Scrub insides of liners with a long-handled brush. Thoroughly rinse insides of liners until all traces of the cleaning solution are washed away and water is drinkable. Leave 1 gallon of clean hot water in each liner. 	<p>3. Coffee urn is clean and ready for next use. There is 1 gallon of clean, hot water in each liner. No one is hurt and the coffee urn is undamaged.</p>

MEAT SLICING MACHINES

NAME OF EQUIPMENT	WHERE FOUND AND USED	WHY USED
Meat Slicing Machine	Is used and found in Army dining facility kitchens.	Allows person to slice food products up to 7" in diameter, 11" wide, and 3" thick.
	BRIEF DESCRIPTION	
	An electric motor drives the revolving circular knife. The table is pushed back and forth by hand. The slicer cuts food up to 7-11-3. The slicing machine consists of:	a. Slicing assembly or chute b. Body assembly c. Drive assembly (Motor)

PARTS OF THE EQUIPMENT - CONTROLS

NAME OF PART	APPEARANCE OF PART	USE OF PART IN THE EQUIPMENT
1. Table Adjusting Knob	1. Round hard grip with grooves. 2. Base plate has numbers and notches. 3. Located at the front of the slicer mounted on the body.	Regulates the distance between the table and the knife; this spacing determines slice thickness. Low number indicates thin slices, high number for thicker slices.
2. Toggle Switch	1. Mounted under the table adjusting knob. 2. Small hole with a switch protruding out of it.	On and off switch for the motor that drives the blade.
3. Sharpener Controls	1. Two grinding stones set at different angles. 2. Has a safety or protective cup over it. 3. Has pull-out knobs and a short handle	Used to sharpen blade when needed.

OPERATION

WHAT	HOW	RESULTS
1. Pre-op Checks	<ol style="list-style-type: none"> 1. Make sure knife guard is securely in place. 2. Make sure the chute is at a proper height and the chute support nut is tight. 3. Make sure the center plate is tightly secured. 	Slicer is now ready for operation.
2. Operate	<ol style="list-style-type: none"> 1. Plug unit in. 2. Pull the chute as far as it will go towards the operator. 3. Place food item in the chute and swing the end weight into place. Be sure that the teeth of the end weight grip the food firmly. The end weight must be used when slicing food. 4. Set the table adjusting knob to its appropriate setting (desired slice thickness). 5. Face the slicing machine and turn the toggle switch to "on" position. 6. Grasp the chute handle firmly with the right hand and slide the chute back and forth across the table and knife. Cut completely through food before retrieving. 	Slicing machine in operation, receiving desired results.
3. Shut-down Procedures	<ol style="list-style-type: none"> 1. Turn toggle switch to off position and set table adjusting knob to zero. 	

G/E #5C

OPERATOR MAINTENANCE

WHAT

1. Cleaning

HOW

1. Always unplug the machine before cleaning it.

2. REMOVING COMPONENTS:

- a. Loosen the chute support nut and remove the chute from the receiver.
- b. Slide the waste box out of its rack.
- c. With the table adjusting set at zero, remove bolt located at the bottom of the knife guard. Loosen but do not remove the nut at the top of the knife guard. Lift the halves of the knife guard up and out of the fork, being careful to avoid contact with the blade.

RESULTS

G/E #5 - INSPECTING, OPERATING, CLEANING THE MEAT SLICER

STEP	WHAT	HOW	RESULTS
1.	<u>PRE-OPERATIONAL CHECK</u> Inspect the meat slicer to make sure it is clean and safe to use.	<p>a. Make sure meat slicer is unplugged. Check electrical cord and outlet for damage or unsafe condition.</p> <p>b. Check the <u>slicing assembly</u>, or chute, <u>body assembly</u>, <u>drive assembly</u>, <u>controls</u>, <u>waste box</u>, etc. to make sure all parts are present, undamaged, and clean. If any parts are missing, loose or damaged or anything is unsafe to use, notify the person in charge. If any parts of the machine are not clean, use the cleaning procedures described in #3 below.</p> <p>c. Make sure the <u>knife guard</u> is securely in place, the chute is at a proper height, the <u>chute support nut</u> is tight, and the <u>center plate</u> is tightly secured.</p>	1. Meat slicer is clean and safe to use or the proper person has been notified.
2.	<u>OPERATION</u> Use the meat slicer to slice food.	<p>a. Plug meat slicer in.</p> <p>b. Pull the <u>chute</u> as far as it will go toward you.</p> <p>c. Place food item in the chute and swing the end weight into place. Be sure that the teeth of the end weight grip the food firmly. (End weight <u>must always</u> be used. Never hand feed food.)</p> <p>d. Set the <u>table adjusting knob</u> to the appropriate setting (desired slice thickness).</p> <p>e. Face the slicing machine and turn the <u>toggle switch</u> to "on".</p> <p>f. Grasp the <u>chute handle</u> firmly with the right hand. Slide the chute back and forth across the table and knife. Cut completely through the food before retrieving.</p> <p>g. After food is sliced, turn the <u>toggle switch</u> to "off" and set the <u>table adjusting knob</u> to zero.</p>	2. Food has been cut into even slices of the proper thickness, no one is hurt, and the meat slicer is undamaged.

G/E #5 - INSPECTING, OPERATING, CLEANING THE MEAT SLICER (CONT'D)

STEP	WHAT	HOW	RESULTS
3.	<p><u>CLEANING:</u> Clean the meat slicer after each use. Keep clean, sharp, and lubricated.</p>	<p><u>a. AFTER EACH USE:</u></p> <ol style="list-style-type: none"> (1) Unplug the meat slicer. (2) Remove components for cleaning. <ol style="list-style-type: none"> a) Loosen the <u>chute support nut</u> and remove the chute from the receiver. b) Slide the <u>waste box</u> out of its rack. c) Set the <u>table adjusting knob</u> at zero. Remove bolt at the bottom of the <u>knife guard</u>. Loosen, but do not remove, the nut at the <u>top</u> of the <u>knife guard</u>. Lift the halves of the <u>knife guard up and out</u> of the fork, being very careful to avoid contact with the blade. (3) Wash components in hot, detergent solution. Scrub waste box with stiff brush to remove grease. Since all components thoroughly with clean hot water and allow to air dry. (4) Wash exterior of machine and knife with clean cloth dampened in hot detergent solution and rinse thoroughly with cloth dampened in clear hot water. Dry with clean dry cloth. <p>PAY PARTICULAR ATTENTION TO HOW YOU CLEAN THE KNIFE. WASH FROM CENTER OF BLADE OUT TOWARD THE EDGE. DO NOT GO AROUND THE BLADE WITH THE CLOTH. AVOID ACCIDENTALLY TOUCHING EDGE.</p> <ol style="list-style-type: none"> (5) Replace the dry components on the machine in the following order: <ol style="list-style-type: none"> a) Knife guard b) Waste box c) Chute <p><u>b. PERIODICALLY:</u></p> <ol style="list-style-type: none"> (1) Lubricate the <u>slide rod</u> weekly with a small amount of mineral oil. (2) Sharpen the knife when necessary (follow manual directions). (3) Completely disassemble machine for cleaning (follow manual directions for removing knife blade, sharpener stones, etc.). 	<p>3. Meat slicer is clean and ready for reuse. No one is hurt and meat slicer is undamaged.</p>

INSPECTING, OPERATING, AND CLEANING THE DEEP FAT FRYING MACHINE

NOTE: Procedures described are for gas deep fat fryer.

STEP	WHAT	HOW	RESULTS
1.	<u>Preoperational Check:</u> Check the deep fat fryer to make sure it is clean and safe to use.	<p>a. Make sure the main gas valve and the combination gas control valve are "off". Smell for gas. See if pilot is lit. If you smell gas, do not attempt to light. Notify the person in charge.</p> <p>b. Examine the deep fat fryer exterior, controls, fat container, fry basket, burner holes, etc. Check to see if anything is missing, damaged or not clean. If the machine or any part is damaged or unsafe to use, notify the person in charge. If anything needs cleaning, use the procedures described in No. 3 below.</p>	1. Deep fat fryer is clean and safe to use or the proper person has been notified.
2.	<u>Operation:</u> Use the deep fat fryer for cooking.	<p>a. <u>Lighting:</u> (1) Close drain valves. Slowly and carefully pour liquid fat into fat container to the proper level. (Solid fat should be melted prior to filling container.) (2) Be sure <u>thermostat</u> and <u>combination gas control valve</u> are set on "off" (3) Open the <u>main gas valve</u>. (4) Light a taper. When the taper is burning steadily, turn the <u>combination gas control dial</u> to PILOT. Press the dial, hold it, and put the flame to the pilot opening to light the pilot. Continue pressure and hold 30-45 seconds. If pilot doesn't light or remain lit, turn dial to OFF and wait about 5 minutes for the gas to clear before attempting to relight the pilot. (5) When pilot is burning steadily, turn the <u>combination gas control dial</u> to ON. Check to see that the burner is lit. Set thermostat to the required temperature. (6) Allow fat to heat 10-15 min. to read the required temperature.</p> <p>NOTE: If the combination gas control valve cuts the gas off at any time, ventilate the fryer thoroughly before attempting to relight.</p>	2. Food has been cooked in the deep fat fryer, no one is hurt, and fryer is undamaged, used fat is filtered and stored in the refrigerator for the next day's use.

INSPECTING, OPERATING, AND CLEANING THE DEEP FAT FRYING MACHINE (CONT'D)

STEP	WHAT	HOW	RESULTS
		<p>b. <u>Frying:</u></p> <p>(1) Put food items to be fried into wire basket. Do not load the basket too full. (Large quantity chills the fat)</p> <p>(2) Lower basket slowly into the hot fat. (Lowering too quickly chills the fat.)</p> <p>(3) When cooking french fries, shake basket occasionally to insure even browning.</p> <p>(4) During standby periods, turn the thermostat to 250°. For temporary shut down, turn the combination gas control valve to PILOT.</p> <p>c. <u>End of Day's Frying:</u></p> <p>(1) Turn the combination gas control valve and the <u>thermostat</u> to OFF. Close the <u>main gas valve</u>.</p> <p>(2) Drain fat (fryer equipped with filter).</p> <p>a) Place filter in holder/china cap and attach to container. Position container under drain valve.</p> <p>b) Open drain valve <u>slowly</u> (to avoid splashing hot fat).</p> <p>c) After all fat has drained, remove and discard paper filter.</p> <p>(3) Lightly cover container of fat with clean cloth. Allow to cool to room temperature. Store in refrigerator.</p> <p>NOTE: Add fresh fat every day. AT least 15% of the fat should be fresh. Remove enough fat from the previous day's operation to make room for the fresh fat. (Revitalizes used fat and keeps it from breaking down.)</p>	

INSPECTING, OPERATING, AND CLEANING THE DEEP FAT FRYING MACHINE (CONT'D)

STEP	WHAT	HOW	RESULTS
3.	<u>Cleaning:</u> Clean the deep-fat fryer after the day's operation.	<p>a. After draining the used fat, flush out food particles off the sides of the container with a little hot fat. Allow to drain off.</p> <p>b. Close drain valves. Fill the fat container with a hot detergent solution.</p> <p>c. Light or turn on the fryer. Set the thermostat at its highest setting until solution reaches foiling point. Turn thermostat down to 250° and allow solution to simmer for 10 minutes.</p> <p>d. Drain off a bucketful of solution and use it to scrub the basket support ledges and insides above the solution with a brush.</p> <p>e. Drain off the rest of the detergent solution.</p> <p>f. Fill the container with clear hot water. Bring to a boil. Turn down and simmer for 10 minutes.</p> <p>g. Turn thermostat control knob to OFF. Close main gas valve.</p> <p>h. Open drain valve. As hot clear water drains, scrub sides of fat container with a clean brush. Leave drain valves open so air can circulate. Place cover on fryer.</p> <p>i. Soak and scrub fry baskets in hot detergent solution. Rinse well in hot clear water. Allow to air dry.</p> <p>j. Wash all exterior surfaces of the fryer with a hot detergent solution, rinse with clear hot water, and wipe with a dry cloth.</p>	3. Deep-fat fryer is clean and ready for reuse, no one is hurt, and the fryer is undamaged.

INSPECTING, OPERATING, CLEANING/MAINTENANCE OF THE GAS GRIDDLE

WHAT	HOW	RESULTS
1. <u>Pre-operational Check:</u> Inspect the gas griddle and make sure it is ready for use.	a. Make sure the temperature control knob is on "off". Smell for gas. See if pilot is lit. If you smell gas, do not attempt to light. b. Check the temperature control knob, griddle plate, and grease trough (pronounced "trawth"). Make sure they are there, undamaged, and clean. If any part is so damaged it is unusable, notify the person in charge. If any part is dirty or greasy, clean, using the procedures described in #3 below.	1. The gas griddle is either clean and safe to light and use or the proper person has been notified.
2. <u>Operation:</u> Prepare the gas griddle for use in cooking food.	a. <u>Light the Pilot:</u> 1) Find the pilot light opening under the griddle plate. 2) Light a taper stick or tightly rolled piece of paper and place the burning end at the pilot light opening. 3) Press the temperature control knob in (do not turn it). Hold the knob in for 30-45 seconds. If the pilot does not light or stay lit, wait 5 minutes for gas to clear before attempting to relight the pilot. b. <u>Preheat the Griddle:</u> 1) Turn the temperature control knob to "high". Allow the griddle to preheat at "high" for 10 minutes. 2) Turn the temperature control knob down to the required temperature. Allow 5 minutes for the temperature to settle at the desired level. c. <u>Cleaning During Use:</u> 1) Use scraper to push excess grease, juices, food particles, etc., to the opening leading to the grease trough. 2) If grease, etc., begins to build up on the griddle plate during use, carefully pour cup of hot water directly on the griddle plate (keep hands and face away from the steam). Allow the water to boil up and then, scrape it and the loosened buildup toward the grease trough opening. d. <u>Temporary Shut Down:</u> When griddle is not in use, turn the temperature control knob to "off". Do not put the pilot light out.	2. Gas griddle is lit, preheated, and ready for use in cooking food before and/or during a meal. Food is cooked on the griddle, no one is hurt, and the gas griddle is undamaged.

INSPECTING, OPERATING, CLEANING/MAINTENANCE OF THE GAS GRIDDLE

WHAT	HOW	RESULTS
<p>3. <u>Cleaning and Maintenance:</u> Clean the gas griddle and reseason the griddle plate after each meal. Use special seasoning procedures before using a new gas griddle.</p>	<p>a. <u>Cleaning After Each Meal:</u></p> <ol style="list-style-type: none"> 1) Check to be sure the temperature control knob is on "off". (However, the griddle plate should be cleaned while it is still hot). 2) Scrape surface particles, grease, etc., to the grease trough opening so the griddle plate is as free as possible of debris. 3) Pour a small amount of mineral oil on the griddle plate. Put a "grill stone" or "grill screen" on the oil and rub onto the grill plate surface. Rub with the "grain" of the griddle plate. If you don't see the grain, rub front to back, back to front, back and forth. Do <u>not</u> use a circular motion. (Never use a hot detergent solution to clean the griddle plate!) 4) Remove the grease trough and discard contents in the appropriate container. Scrub grease trough in hot, detergent solution. Rinse twice in hot water and invert on sink drain to air dry. 5) Wash down splatter shields and exterior surfaces of the gas griddle (not the griddle plate) with a detergent solution, using a clean disposable cloth. Wipe down with a cloth, damp with clear hot water. 6) Replace the clean, dry grease trough. 7) Reseason the griddle plate. Oil the surface and heat to 250°. Allow to heat for 15 minutes. Turn off and allow to cool (to touch). Rub the surface with a dry, clean disposable cloth. <p>b. <u>Initial Seasoning:</u></p> <ol style="list-style-type: none"> 1) Use a hot detergent solution (the only time it is ever used on a griddle plate) to wash the manufacturer's grease off the griddle plate. Rinse with clear hot water and dry with a clean disposable cloth. 2) Coat the griddle plate with common table salt. Heat then at 350° - 400° for one hour. Turn off and allow to cool completely. Remove the salt with a clean cloth or soft brush. (This process seals the pores of the griddle plate and prevents food from sticking to it). 	<p>3. Gas griddle is clean and ready for reuse. No one is hurt and the gas griddle is undamaged.</p>

NOTE: The procedures below are for gas-type convection oven.

G/E #8

INSPECTING, OPERATING AND CLEANING THE CONVECTION OVEN

WHAT	HOW	RESULTS
1. <u>Pre-operational Check:</u> Inspect the convection oven to make sure it is clean and safe to use.	a. Make sure the gas control dial is on OFF. Smell for gas. If you smell gas, do not attempt to light the pilot. Notify the person in charge. b. Check outside and insides of oven, racks, fan, seal around door, controls, etc., for damage and grease or dirt. If any part of the oven seems damaged or unsafe to use, notify the person in charge. If anything needs cleaning, use the procedures described in #3 below.	1. The convection oven is clean and safe to use or the proper person has been notified.
2. <u>Operation:</u> Use the oven to cook foods.	a. <u>Lighting:</u> 1) Light a taper or thinly rolled paper. Turn gas control dial to PILOT. Place burning end of taper in pilot light opening. Push gas control dial in. Hold for 30-45 seconds until pilot lights and burns steadily. Turn pilot control dial to on position. 2) If pilot does not light or stay lit, turn gas control dial to OFF. Wait for 5 minutes for gas to clear before attempting to relight the pilot. b. <u>Setting:</u> 1) Turn the <u>thermostat control</u> to the required temperature. 2) Turn on <u>power switch</u> . Fan will turn on and oven will begin to heat. c. <u>Opening Door:</u> When opening oven door during cooking step back. d. <u>Shut Down:</u> Turn <u>gas control dial</u> to OFF and turn <u>power switch</u> OFF.	2. Oven has been used for cooking, no one is hurt, and the oven is undamaged.

INSPECTING, OPERATING AND CLEANING THE CONVECTION OVEN (CONT'D)

WHAT	HOW	RESULTS
<p>3. <u>Cleaning:</u> Clean convection oven after each use and weekly.</p>	<p>a. <u>Cleaning After Each Use:</u></p> <ol style="list-style-type: none"> 1) Make sure oven is shut down and has cooled 2) Wipe oven with a cloth dampened with water and a mild detergent solution; wipe with cloth moistened with clean warm water. <p>b. <u>Weekly Cleaning:</u></p> <ol style="list-style-type: none"> 1) Make sure oven is shut down and has cooled. 2) Remove racks and side rack holders. Wash in a mild detergent solution. Scrub with a stiff brush. Rinse well in hot water and allow to air dry. 3) Scrub insides of oven with stiff brush dipped in mild detergent solution. Rinse by wiping with clean disposable cloth dampened with clear hot water. Wipe dry with clean disposable cloth. 4) Replace dry rack holders and racks. Close door. 5) Wash outside of oven and door, inside and out, with cloth dampened in detergent solution. Rinse by wiping with cloth dampened in clear hot water. Wipe dry with clean dry disposable cloth. 	<p>3. Convection oven is clean and ready for reuse, no one is hurt, and oven is undamaged.</p>

INSPECTING, OPERATING, AND CLEANING THE TAYLOR FREEZER (ICE CREAM MACHINE)

WHAT	HOW	RESULTS
1. <u>Pre-Operation Check:</u> Inspect the machine to make sure it is clean, operational, and safe to use.	a. 1) Insure all parts are present and clean. 2) Insure machine is clean. b. <u>To Assemble:</u> 1) Apply Taylor Lub to bearing surface and seal ring of beater drive shaft and insert shaft through rear shell bearing with mexagon end seated firmly in drive socket of gear unit. 2) Install scraper blades in blade holders on beater frame with cutting edge toward outside and pins through holes in end of blades. 3) Holding blades in place, insert beater into freezer shell with drive bar over flattened surface of beater drive shaft and all the way back. 4) Lubricate and position freezer door gasket and bearing sleeve on door. 5) Position freezer door gasket and bearing sleeve on door. 6) Position freezer door over studs around freezer opening and install hand screws. Tighten <u>bottom screws</u> first to provide positive seal. 7) Sanitize freezer using solution containing 2 tablespoons of Clorox to 2 gallons of cold water and drain thoroughly.	1. Taylor Freezer is clean and ready for use. Or, if it has been found to be damaged or to have parts missing, the person in charge has been informed.
2. <u>Operation:</u> Fill and operate the machine.	a. Position mix feed assembly into hopper. Pour remaining mix into hopper. Do not go over top of mix feed assembly within 1/4". b. Put 2 quarts of ice cream mix in hopp	2. Soft serve ice cream is proper temperature and consistency, draws easily from either soft-serve or shake-type draw valve. No one is hurt and the equipment is undamaged.

INSPECTING, OPERATING, AND CLEANING THE TAYLOR FREEZER (ICE CREAM MACHINE)--CONT'D.

WHAT	HOW	RESULTS
<p>3. <u>Cleaning and Maintenance:</u></p> <p>Clean the Taylor Freezer (ice cream machine) directly after each use. Keep clean at all times.</p>	<p><u>Closing and Cleaning Procedures:</u></p> <ul style="list-style-type: none"> a. Move switch to wash position b. Let run for 10 minutes. c. Drain mix out and discard. d. Turn off. e. Remove hopper feed assembly; set aside to be cleaned later. f. Pour 2 gallons of lukewarm water into hopper. g. Turn on wash position and let run for 5 minutes. h. Drain milky water out and discard. i. Turn off. j. Fill hopper with 2 gallons of warm water, turn on, scrub interior of hopper with stiff brush, drain, and discard. Turn machine off. k. Mix 2 tablespoons of Clorox to 2 gallons of warm water. l. Pour 1 gallon of water/Clorox mixture in hopper; set aside remaining gallon for later use. m. Turn machine on; scrub interior of hopper with stiff brush. n. Drain and discard Clorox, water mixture. o. Turn machine off. p. Disassemble Taylor Freezer and scrub all parts in Clorox solution and set aside to air dry. q. Prior to next use: <ul style="list-style-type: none"> 1) Assemble Taylor Freezer. 2) Rinse with water Clorox solution to sanitize Taylor Freezer. 	<p>3. Machine is clean and ready for reuse, no one is hurt, and equipment is undamaged.</p>

INSPECTING, OPERATING, AND CLEANING THE CENTER-FIRED GAS RANGE/OVEN

WHAT	HOW	RESULTS
<p>1. <u>Pre-Operational Check:</u> Inspect the range top and oven to make sure it is clean and safe to use.</p>	<p>a. Make sure all gas valves are in OFF position. Smell for gas. If you smell gas, notify the person in charge.</p> <p>b. Check top of range, plates, rings, burner holes, control panel, outside of range, oven door and seal, inside of oven, racks, etc. Note any damage, missing parts, grease, or dirt. If anything is missing or damaged, notify the person in charge. If anything needs cleaning, use the procedures described in #3 below.</p>	<p>1. Center-fired gas range/oven are clean and safe to use or the proper person has been notified.</p>
<p>2. <u>Operation:</u> Light the range and/or oven and use for cooking food.</p>	<p>a. <u>Lighting Range Top:</u></p> <ol style="list-style-type: none"> 1) Remove <u>center plate</u> with the tool provided with the range. 2) Light taper stick and when burning steadily, place burning end in pilot area of center burner. Turn main gas lever on. Then, turn the pilot-gas regulating valve to ON. The pilot light should light immediately. If it doesn't light or stay lit, turn gas valves to OFF. Wait 5 minutes for gas to clear before attempting to relight the pilot. 3) Open the first valve to the <u>left</u> of the pilot valve. Watch to make sure burner lights. Open other burner valves one at a time, making sure each lights before opening the next. 4) Replace center plate with tool. <p>b. <u>Controlling Top Heat:</u></p> <ol style="list-style-type: none"> 1) Allow top burners to remain at high settings for a little while to preheat the plates. 2) After plates are preheated, turn regulating valves to lower heat to required cooking temperature. (Do not overheat plates.) <p>c. <u>Lighting Oven:</u></p> <ol style="list-style-type: none"> 1) Open oven door. 2) Light taper stick and place in opening for pilot light. 3) <u>Open oven gas-regulating valve.</u> Push pilot reset button in and hold in for 30-45 seconds. Pilot should light and stay lit when reset button is released. If it does not, turn valve to OFF, wait 5 minutes for gas to clear, and repeat the procedure. 4) When the pilot is burning steadily, turn the thermostat to the required temperature for cooking. 	<p>2. Center-fired gas range/oven have been used for cooking, no one is hurt, and the equipment is undamaged.</p>

INSPECTING, OPERATING, AND CLEANING THE CENTER-FIRED GAS RANGE/OVEN (CONT'D)

WHAT	HOW	RESULTS
<p>3. <u>Cleaning:</u> Clean the gas range top and oven after use.</p>	<p>a. Turn all gas valves and main gas lever to OFF. Allow range and oven to cool completely.</p> <p>b. Remove center plate, center ring, outer plates. Scrape off surface particles with pastry knife or scraper. Clean by rubbing with mineral oil and a grill stone or grill screen. Rub dry with a clean disposable cloth. (Do not use water on plates.)</p> <p>c. Wipe back plate, exterior portion (other than plates) with disposable cloth dampened with hot detergent solution. Wipe with cloth dampened in clear hot water. Wipe dry with clean dry disposable cloth.</p> <p>d. Remove oven racks, bottom plate of oven. Scrub in hot detergent solution; rinse well in clear, hot water, and air dry.</p> <p>e. Wash down sides of oven with disposable cloth dampened in detergent solution. Wipe down with cloth dampened in clear hot water. Wipe dry with clean dry disposable cloth.</p> <p>f. Replace clean, dry racks and bottom plate.</p> <p>g. Clean exterior of oven as exterior portions of range (other than the cast iron portions).</p>	<p>3. Center-fired gas range/oven is clean and ready for reuse, no one is hurt, and the equipment is undamaged.</p>

94B STUDENT REACTION SURVEY

DATE: _____ CLASS: _____

WHERE TRAINED: _____

The following items are designed to find out your reactions to the cook's training you have had so far. Please respond to each item as completely and accurately as you can. We do NOT wish you to put your name on this form.

1. Two rating scales are provided (this page and the next page). You are to use these scales to rate your willingness (W) and ability (A) are to perform each of the following responsibilities. To make your ratings, do the following:
 - a. Place a check mark (✓) on the (W) scales (that is, the line that appears outside the alphabetical letters) for all of the items that you are willing to do.
 - b. When you have finished checking the (W) scale, then go back and read the items again. Indicate on the (S) scales (that is, the line that appears inside the alphabetical letters) your numerical rating that applies.
 - (1) If you think that you cannot do a given task, then you should rate them 0 on that item.
 - (2) If you think that you can do the task a little bit, then you should rate them a 1.
 - (3) If you are of the opinion that you can do the task somewhat, then you should rate them a 2.
 - (4) If, in your opinion, you can do a task very well, then you should rate them a 3.

(S) 0 = cannot do 1 = little 2 = somewhat 3 = very well

(W) 0 = can't do 1 = little 2 = somewhat 3 = very well

W S

- ___ a) ___ read recipe cards and do what they say.
- ___ b) Prepare standard (not fancy) army food items so they have:
- ___ the proper taste and flavor
- ___ the proper consistency and texture
- ___ the proper appearance
- ___ the proper garnish
- ___ c) ___ prepare and maintain a sanitary, well-organized work area
- ___ d) ___ use proper sanitation and safety procedures
- ___ e) ___ use "clean as you go" procedures
- ___ f) ___ prepare food items without wasting ingredients or supplies
- ___ g) Use a knife properly to:
- ___ slice ___ shred ___ cube ___ dice ___ chop ___ mince
- ___ h) Use proper procedure to:
- ___ weigh different kinds and amounts of dry ingredients
- ___ measure different kinds and amounts of liquid ingredients
- ___ i) Use proper procedure to prepare:
- ___ soups ___ salads ___ basic sauces
- ___ j) Use proper procedure to prepare standard (not fancy) bakery items:
- ___ quick breads ___ cookies ___ cakes ___ rolls ___ pies
- ___ k) Use proper procedure to prepare meats, poultry, and fish by:
- ___ baking ___ roasting ___ frying ___ braising ___ stewing or boiling
- ___ l) Start, operate, and maintain garrison equipment:
- ___ mixer ___ slicer ___ coffee urn ___ milk dispenser ___ oven
- ___ deep fat fryer
- ___ m) Explain the purpose of each piece of garrison equipment and the function of each major part:
- ___ mixer ___ slicer ___ coffee urn ___ milk dispenser ___ oven
- ___ deep fat fryer

W S

- ____ n) ____ convert any recipe to the amounts needed to serve different numbers of soldiers
- ____ o) ____ ask the right questions to find out how to prepare/serve a food item
- ____ p) ____ ask the right questions to find out how to operate and maintain a piece of equipment

2. For any of the items indicated above that you are not confident you can do (rating of 0 or 1) indicate below your reasons for rating the items.

Item # _____

Item # _____

Item # _____

Item # _____

3. If you had a choice, which cook's tasks would you have liked to have worked with longer? To answer this question do the following:

List the tasks below in column A.

Column A

Column B

- | | |
|----------|-------|
| a. _____ | _____ |
| b. _____ | _____ |
| c. _____ | _____ |
| d. _____ | _____ |
| e. _____ | _____ |

Now go back and rank each one in terms of its importance to you. Put a "1" in Column B next to the task that was most important. Put a "2" beside the next most important, etc. Rank all of the tasks that you list.

4. THE TRAINING PROGRAM: Use the rating scale below to rate each of the following statements about your training.

0 = never happened 1 = seldom happened 2 = sometimes happened

3 = often happened 4 = always happened

- a. _____ Before each lesson, I was told what I was going to learn and why I needed to learn it.
- b. _____ My instructor demonstrated each thing I was to learn.
- c. _____ My instructor made sure I understood what to do before I actually did it.
- d. _____ I was told not only what I needed to correct but also what I was doing that was right.
- e. _____ My instructor had me learn the reasons for doing things in a particular way.
- f. _____ I was asked to explain what I was learning.
- g. _____ During class, I was encouraged to share my ideas with other students.
- h. _____ I was treated with respect by my instructor.
- i. _____ Time was wasted doing nothing or doing things that did not help me learn.
- j. _____ When I didn't understand something, my instructor took the time to help me understand without "putting me down."
- k. _____ I was able to read and understand the written materials I was given.
- l. _____ The instruction was too fast for me to follow what was going on.
- m. _____ The instruction was too slow and I got bored.

5. What four (4) changes would you like to see made in your training?

If you do not think anything should be changed, then put N/A on this line _____.

- | | |
|----------|----------|
| a. _____ | c. _____ |
| _____ | _____ |
| b. _____ | d. _____ |
| _____ | _____ |

- e. Now go back and rate the importance of the changes which you would like to see made in the training. Place a "1" beside the most important change, a "2" beside the next, etc.

94BH INSTRUCTOR'S REACTION SURVEY

INSTRUCTOR EXPERIENCE: _____

TRAINING LOCATION: _____ YEARS AS AN ARMY COOK: _____

The following items are designed to find out your reactions to the 94B students you have just trained and to the 94B training program. Please respond to each item as completely and accurately as you can. We do NOT wish you to put your name on this form.

1. Two rating scales are provided (this page and the next page). You are to use these scales to rate what you think your trainees' willingness (W) and ability (A) are to perform each of the following responsibilities. To make your ratings, do the following:
 - a. Place a check mark (✓) on the (W) scales (that is, the line that appears outside the alphabetical letters) for all of the items that you think your trainees were willing to do.
 - b. When you have finished checking the (W) scale, then go back and read the items again. Indicate on the (S) scales (that is, the line that appears inside the alphabetical letters) your numerical rating that applies.
 - (1) If you think that your trainees cannot do a given task, then you should rate them 0 on that item.
 - (2) If you think that your trainees could do the task a little bit, then you should rate them a 1.
 - (3) If you are of the opinion that your trainees could do the task somewhat, then you should rate them a 2.
 - (4) If, in your opinion, your trainees could do a task very well, then you should rate them a 3.


(S) 0 = cannot do 1 = little 2 = somewhat 3 = very well

- c. Remember, use only the above four ratings for scale (S) and rate each item that has a _____ before it.

(W) 0 = can't do 1 = little 2 = somewhat 3 = very well

W S

- ___ a) ___ read recipe cards and do what they say
- ___ b) Prepare standard (not fancy) Army food items so they have:
- ___ the proper taste and flavor
- ___ the proper consistency and texture
- ___ the proper appearance
- ___ the proper garnish
- ___ c) ___ prepare and maintain a sanitary, well-organized work area
- ___ d) ___ use proper sanitation and safety procedures
- ___ e) ___ use "clean as you go" procedures
- ___ f) ___ prepare food items without wasting ingredients or supplies
- ___ g) Use a knife properly to:
- ___ slice ___ shred ___ cube ___ dice ___ chop ___ mince
- ___ h) Use proper procedure to:
- ___ weigh different kinds and amounts of dry ingredients
- ___ measure different kinds and amounts of liquid ingredients
- ___ i) Use proper procedure to prepare:
- ___ soups ___ salads ___ basic sauces
- ___ j) Use proper procedure to prepare standard (not fancy) bakery items:
- ___ quick breads ___ cookies ___ cakes ___ rolls ___ pies
- ___ k) Use proper procedure to prepare meats, poultry, and fish by:
- ___ baking ___ roasting ___ frying ___ braising ___ stewing or boiling
- ___ l) Start, operate, and maintain garrison equipment:
- ___ mixer ___ slicer ___ coffee urn ___ milk dispenser ___ oven
- ___ deep fat fryer
- ___ m) Explain the purpose of each piece of garrison equipment and the function of each major part:
- ___ mixer ___ slicer ___ coffee urn ___ milk dispenser ___ oven
- ___ deep fat fryer

- _____ n) _____ convert any recipe to the amounts needed to serve different numbers of soldiers
-  o) _____ ask the right questions to find out how to prepare/serve a food item
- p) _____ ask the right questions to find out how to operate and maintain a piece of equipment

2. How would you compare the ICI instructor training program you were involved in, to other Army training programs you have participated in? Rate each of the following criteria using the rating scale below.

1 - much poorer 2 - poorer 3 - same 4 - better 5 - much better

Criteria:

- a. _____ The organization and sequencing of what was to be learned.
- b. _____ The percentage of the program that was directly relevant to your responsibilities.
- c. _____ The extent to which you learned how to apply what you were learning to your current (or future) responsibilities.
- d. _____ The degree to which the training program created a desire on your part to apply what you learned to your responsibilities.
- e. _____ The amount of training time spent on relevant issues.
- f. _____ The amount of confidence you developed from the training in your ability to produce better results in your responsibilities.
3. What priority rating would you give to training Army instructors in the ICI Strategies? Check one.
- _____ top _____ high _____ Medium _____ low _____ bottom

What are your reasons for this rating?

4. What priority rating would you give to training Instructional Leaders in the ICI Strategies?

___ top ___ high ___ medium ___ low ___ bottom

What are your reasons for this rating?

5. What are the major advantages of the ICI Strategies for:
Army instructors?

Their students?

Instructional Leaders?

6. What do you think are the major disadvantages of the ICI Strategies for:
Army instructors?

Their students?

Instructional Leaders?

Evaluation
Learning Strategies Training Program
94B10
Fort Lee Virginia

APPENDIX B
DATA TABULATION AND SUMMARY

Appendix B
DATA TABULATION AND SUMMARY

Index to Data Tables

Section 1 - Combined Ratings

Summary Data

Summary of all data about each group in each cycle of the evaluation.

- *Student Characteristics* Page B-10
Summary of group totals and averages for items used to define student characteristics in both the self-paced and the ICI groups for each of the two cycles of training evaluated.
- *Summary of Results* Page B-11
Summary of group totals, averages, and percent of possible rating scores for each major area of competencies and reactions evaluated.

Student Achievement

Combined ratings for each group in each cycle showing the number and percent of students whose performance was rated above, at, or below the Minimum Acceptable Level (MALP).

- *Completion Tasks* Page B-14
Totals for each group showing performance above, at, or below MALP for the average of all ratings in the evaluation of completed food items in small quantity cooking and small quantity baking.
- *Procedures Ratings* Page B-15
Totals for each group showing performance above, at, or below MALP for the average of all ratings in the evaluation of procedures followed in the preparation of a food item in small quantity cooking and baking.
- *Confidence/Attitude Indicators* Page B-16
Totals for each group showing performance above, at, or below MALP for the average of all ratings of the confidence/attitude indicators shown during the preparation of a food item in small quantity cooking and baking.
- *Cooking Skills* Page B-17
Totals for each group showing performance above, at, or below MALP during the evaluation of cooking skills.

- **Garrison Equipment** Page B-18
Totals for each group showing performance above, at, or below MALP during the evaluation of competency with garrison equipment
- **Recipe Conversion** Page B-19
Totals for each group of the raw scores graded in recipe conversion, showing percent of total students achieving scores in various ranges.

Frequency Distribution of Rating Scores

Students were rated on a scale of 0 to 4 that represented performance at the desired level of performance (4); above the minimum acceptable level of performance (3); at the minimum acceptable level of performance (2); below the minimum acceptable level of performance (1); or did not do (0). These data show how many students in all groups were rated at each level of the rating scale.

- **Completion Tasks--Food Items** Page B-22
Frequency of rating scores on each food item prepared in both small quantity cooking and in small quantity baking.
- **Completion Tasks--Criteria**..... Page B-23
Frequency of rating scores for each criterion used to evaluate the completed food item in small quantity cooking and baking.
- **Procedures** Page B-24
Frequency of rating scores for each criterion used to evaluate the procedures followed by students in the preparation of a food item in small quantity cooking and baking.
- **Confidence/Attitude Indicators** Page B-25
Frequency of rating scores for each of the confidence/attitude indicators evaluated for students during the preparation of a food item in small quantity cooking and baking.
- **Cooking Skills**..... Page B-26
Frequency of rating scores on the criteria used to evaluate cooking skills.
- **Garrison Equipment** Page B-27
Frequency of rating scores on the criteria used to evaluate competencies with garrison equipment.
- **Garrison Equipment - By Item Average** Page B-28
Frequency of rating scores, based on the average rating, for the individual items of garrison equipment on which student competency was evaluated.
- **Garrison Equipment - By Item Total** Page B-29
Frequency of rating scores based on total of individual ratings for each item of garrison equipment on which student competency was evaluated.

- *Recipe Conversion* Page B-30
Frequency of raw scores earned by each group in the recipe conversion problems.

Combined Ratings

These data show the total scores earned by each group (TOT); the number of students in each group rated (N); the average rating score (AVG); and the percent of the possible score achieved(%) by each group in each cycle.

- *Completion Tasks--Food Items* Page B-32
Combined ratings for both small quantity cooking and baking in the evaluation of each food item in each menu:
- *Completion Tasks--Criteria* Page B-33
Combined ratings in the evaluation of each criterion used to evaluate the completed food items in both small quantity cooking and baking.
- *Procedures* Page B-34
Combined ratings for the evaluation of each of the criterion evaluated in assessing the procedures used by students in the preparation of a food item in small quantity cooking and baking.
- *Confidence/Attitude Indicators* Page B-35
Combined ratings for the evaluation of each of the confidence/attitude indicators evaluated in the preparation of a food item in small quantity cooking and baking.
- *Cooking Skills* Page B-36
Combined ratings for the evaluation of each criterion used to assess student proficiency in cooking skills.
- *Garrison Equipment by Criterion* Page B-37
Combined ratings for the evaluation of each criterion used to assess student competency with garrison equipment.
- *Garrison Equipment by Equipment Item* Page B-38
Combined ratings for the evaluation of student competencies on each item of garrison equipment.
- *Garrison Equipment by Task Competency* Page B-39
Combined ratings for the evaluation of student competency on groups of criteria by skill demonstrated in using garrison equipment.
- *Perceptions of Competency*..... Pages B42-B43
Combined ratings for the students' own ratings of their perceived competencies in task performance.
- *Reactions to the Training Program* Pages B44-B45
Combined ratings for the students' reactions to and perceptions of the training program.

Small Quantity Cooking Combined Ratings

Combined ratings for both groups in each cycle on the completion tasks, procedures, and confidence/attitude indicators evaluated in small quantity cooking only.

- **Completion Tasks** Page B-48
Total ratings of each group for the 3 criteria used to evaluate the completed food item for each of the 4 items on the small quantity cooking menus.
- **Procedures** Page B-49
Total ratings of each group for the 11 criteria used to evaluate the procedures followed by students in preparing one item on the menu for small quantity cooking.
- **Confidence/Attitude Indicators** Page B-50
Total ratings of each group for the 5 confidence/attitude indicators evaluated in students when preparing one item on the menu for small quantity cooking.

Small Quantity Baking Combined Ratings

Combined ratings for both groups in each cycle on the completion tasks, procedures, and confidence/attitude indicators evaluated in small quantity baking only.

- **Completion Tasks** Page B-52
Total ratings of each group for the 3 criteria used to evaluate the completed food item for each of the 5 items on the small quantity baking menus.
- **Procedures** Page B-53
Total ratings of each group for the 11 criteria used to evaluate the procedures followed by students in preparing one item on the menu for small quantity baking.
- **Confidence/Attitude Indicators** Page B-54
Total ratings of each group for the 5 confidence/attitude indicators evaluated in students when preparing one item on the menu for small quantity baking.

Section 2

Tabulated Data from Cycle 1
Groups Starting Training 15 July 1981

and

Section 3

Tabulated Data from Cycle 2
Groups Starting Training 19 August 1981

Summary Data

Student characteristics and summary of individual student ratings on all areas of training evaluated.

- *Student Characteristics*..... Cycle 1--Pages B56-B57
Cycle 2--Pages B94-B95

Individual student totals and averages for each item used to define student characteristics.

- *Percent of Total Scores* Cycle 1--Pages B58-B59
Cycle 2--Pages B96-B97

Summary of the total rating scores for each individual student showing the percent of possible score achieved.

- *Summary by Task* Cycle 1--Pages B60-B61
Cycle 2--Pages B98-B99

Summary of the raw scores by individual student for each task evaluated.

Frequency Distribution of Rating Scores

Students were rated on a scale of 0 to 4 that represented performance at the desired level of performance (4); above the minimum acceptable level of performance (3); at the minimum acceptable level of performance (2); below the minimum acceptable level of performance (1); and did not do (0). These data show how many students were rated at each level of the rating scale.

- *Completion Tasks--Food Items*..... Cycle 1--Page B 62
Cycle 2--Page B100

Frequency of rating scores on each food item in small quantity cooking and baking combined.

- *Completion Tasks--Criteria*..... Cycle 1--Page B 63
Cycle 2--Page B101

Frequency of rating scores on each criterion used to evaluate food items in small quantity cooking and in small quantity baking.

- *Procedures* Cycle 1--Page B 64
Cycle 2--Page B102

Frequency of rating scores on each criterion used to evaluate procedures followed by students in preparing a food item in both small quantity cooking and small quantity baking.

- *Confidence/Attitude Indicators* Cycle 1--Page B 65
Cycle 2--Page B103

Frequency of rating scores on each of the confidence/attitude indicators evaluated in a student when preparing an item in small quantity cooking and baking.

- *Cooking Skills* Cycle 1--Page B 66
Cycle 2--Page B104

Frequency of rating scores on each skill evaluated.

- *Recipe Conversion* Cycle 1--Page B 67
Cycle 2--Page B105

Frequency of raw scores attained by each group in the evaluation of problems in recipe conversion.

- *Garrison Equipment by Item* Cycle 1--Page B 68
Cycle 2--Page B106

Frequency of rating scores for each piece of garrison equipment on which students were rated.

- *Garrison Equipment by Criteria* Cycle 1--Page B 69
Cycle 2--Page B107

Frequency of rating scores for each criterion used to evaluate student knowledge of garrison equipment.

Small Quantity Cooking Individual Student Scores

- *Completion Tasks* Cycle 1--Pages B 70-B 71
Cycle 2--Pages B108-B109

Individual student ratings for the 3 criteria used to evaluate the completed food item of the 4 items on the small quantity cooking menu.

- *Procedures* Cycle 1--Pages B 72-B 73
Cycle 2--Pages B110-B111

Individual student ratings for the 11 criteria used to evaluate the procedures followed by students in the preparation of one item on the menu of small quantity cooking.

- *Confidence/Attitude Indicators*... Cycle 1--Pages B 74-B 75
Cycle 2--Pages B112-B113

Individual student ratings for the 5 confidence/attitude indicators evaluated during the preparation of one item on the menu of small quantity cooking.

Small Quantity Baking Individual Student Scores

- *Completion Tasks* Cycle 1--Pages B 76-B 77
Cycle 2--Pages B114-B115

Individual student ratings for the 3 criteria used to evaluate the completed food item of the 5 items on the small quantity baking menu.

- *Procedures* Cycle 1--Pages B 78-B 79
Cycle 2--Pages B116-B117

Individual student ratings for the 11 criteria used to evaluate the procedures followed by students in the preparation of one item on the menu of small quantity baking.

- *Confidence/Attitude Indicators* ... Cycle 1--Pages B 80-B 81
Cycle 2--Pages B118-B119

Individual student ratings for the 5 confidence/attitude indicators evaluated during the preparation of one item on the menu of small quantity baking.

Cooking Skills Individual Student Scores

- *Cooking Skills* Cycle 1--Pages B 82-B 83
Cycle 2--Pages B120-B121

Individual student ratings for the 5 criteria used to evaluate student performance in cooking skills.

Garrison Equipment Individual Student Scores

- *Garrison Equipment by Criteria*... Cycle 1--Pages B 84-B 85
Cycle 2--Pages B122-B123

Individual student ratings for the 15 criteria used to evaluate student knowledge of each of two items of garrison equipment.

- *Garrison Equipment by Item*..... Cycle 1--Page B 86
Cycle 2--Page B124

Total raw scores for each individual student on a specific item of garrison equipment, combining the 15 criteria used to evaluate.

- *Garrison Equipment by Task*..... Cycle 1--Page B 87
Cycle 2--Page B125

Total raw scores for each individual student on groups of criteria by skill demonstrated in using garrison equipment.

Recipe Conversion Scores

- *Recipe Conversion* Cycle 1--Page B 88
Cycle 2--Page B126

Individual raw scores and percent of possible scores
for each student in the recipe conversion problems.

Reaction Surveys

- *Reactions to Task Competencies* Cycle 1--Page B 90
Cycle 2--Page B128

Combined group scores on each item rated by students
indicating their perceptions of competency to per-
form critical tasks.

- *Reactions to the Training Program* Cycle 1--Page B 91
Cycle 2--Page B129

Combined group scores on each item rated by students
indicating their evaluation of various aspects of
their training.

Evaluation
Learning Strategies Training Program
94B10
Fort Lee Virginia

COMBINED RATINGS

Cycle 1
Groups Starting Training 15 July 1981

Cycle 2
Groups Starting Training 19 August 1981

STUDENT CHARACTERISTICS

STUDENT CHARACTERISTIC	ICI Cycle 1		ICI Cycle 2		ICI Combined		Self-Paced Cycle 1		Self-Paced Cycle 2		Self-Paced Combined	
	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%
Group Size	18		16		34		18		14		32	
Regular Army	10	55.6	11	68.8	21	61.8	14	77.8	12	85.7	26	81.3
Army Reserve	4	22.2	2	12.5	6	17.6	1	5.6	0	0.0	1	3.1
Natl. Guard	4	22.2	3	18.8	7	20.6	1	5.6	2	14.3	3	9.4
SEX												
Male	16	88.9	14	87.5	30	88.3	15	83.3	11	78.6	26	86.7
Female	2	11.1	2	12.5	4	11.8	1	5.6	3	21.4	4	13.3
RACE												
Caucasian	11	61.1	9	56.3	20	58.8	9	50.0	7	50.0	16	50.0
Black	7	38.9	5	31.3	12	35.3	5	27.8	4	28.6	9	28.1
Other	0	0.0	2	12.5	2	5.9	2	11.1	3	21.4	5	15.6
Average Age	21.1		21.1		21.1		20.6		19.4		20.1	
Educ. Level	10.6		11.3		10.6		10.5		10.1		10.3	
APTITUDE SCORES												
OF	91.3		93.5		92.8		98.3		91.3		95.1	
GT	92.7		93.1		92.9		94.4		90.0		92.8	
(*) Prerequisite Score Not Met	4	22.2	3	18.8	7	20.6	3	16.7	2	14.3	5	15.6
CO	92.1		93.7		92.8		93.6		92.0		92.9	
FA	90.8		94.6		92.6		95.		93.1		94.5	
EL	90.8		79.5		85.5		95.4		87.7		91.9	
GM	89.3		86.0		87.8		96.2		86.9		91.9	
MM	90.8		89.4		90.1		95.4		88.7		92.3	
CL	92.3		96.0		94.0		94.9		92.9		94.0	
ST	89.9		82.0		86.2		97.1		91.1		94.3	
SC	88.4		93.8		90.9		93.5		89.3		91.6	
PREVIOUS AIT FAILS	1	5.6	0	0.0	1	2.9	4	22.2	0	0.0	4	12.5

(*) Course prerequisites require a standard score of 90 or higher in OF or GT.

SUMMARY OF RESULTS

B-11

Evaluation of the Learning Strategies Training Program 94B10 - Fort Lee, Virginia

	Completion Tasks Cooking & Baking	Procedures Cooking & Baking	Confid/Attitude Indicators	Cooking Skills	Completion Tasks Garrison Equipment	Recipe Conversion	Reaction Survey Task Competency	Reaction Survey Training Program
ICI GROUP CYCLE 1								
Totals	933	933	451	165	1142	91	1342	372
Criteria (N)	390	340	155	70	450	16	521	120
Mean	2.4	2.7	2.9	2.4	2.5	5.7	2.6	3.1
Percent of Possible	59.8	68.6	72.7	58.9	63.1	35.7	85.9	77.5
ICI GROUP CYCLE 2								
Totals	958	787	406	94	1185	111	1308	451
Criteria (N)	396	330	150	50	465	16	513	150
Mean	2.4	2.4	2.7	1.9	2.5	6.9	2.6	3.0
Percent of Possible	60.5	59.6	67.7	47.0	63.7	36.5	85.0	75.2
ICI GROUPS COMBINED								
Totals	1891	1720	857	259	2327	202	2650	823
Criteria (N)	786	670	305	120	915	32	1034	270
Mean	2.4	2.6	2.8	2.1	2.5	6.3	2.6	3.0
Percent of Possible	60.1	64.2	70.3	54.0	63.6	33.2	85.4	76.2
SELF-PACED GROUP CYCLE 1								
Totals	874	762	371	154	594	68	763	224
Criteria (N)	369	302	142	70	345	14	350	80
Mean	2.4	2.5	2.6	2.2	1.6	4.9	2.2	2.8
Percent of Possible	59.2	63.1	65.3	55.0	43.1	25.6	72.7	70.0
SELF-PACED GROUP CYCLE 2								
Totals	799	711	342	124	625	103	1331	322
Criteria (N)	357	308	139	60	405	14	545	120
Mean	2.2	2.3	2.5	2.1	1.5	7.4	2.4	2.7
Percent of Possible	56.0	57.7	62.9	51.7	38.6	38.7	81.4	67.1
SELF-PACED GROUPS COMBINED								
Totals	1673	1473	713	278	1219	171	2094	546
Criteria (N)	726	610	281	130	750	28	895	200
Mean	2.3	2.4	2.5	2.1	1.6	6.1	2.3	2.7
Percent of Possible	57.6	60.4	63.4	53.5	40.6	32.1	78.0	68.3

COMBINED RATINGS
Cycle 1 -- Cycle 2

Student Achievement

STUDENT ACHIEVEMENT

Completion Tasks
Small Quantity Cooking and Baking

(Based on average rating for each food item)

	ICI GROUPS						SELF-PACED GROUPS					
	Cycle 1		Cycle 2		Combined		Cycle 1		Cycle 2		Combined	
	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%
Items Rated N=	129		132		261		123		119		242	
DLP	5	3.9	7	5.3	12	4.6	7	5.7	4	3.4	11	4.5
MALP	96	74.4	97	73.5	193	73.9	89	72.4	87	73.1	176	72.7
NOGO	28	21.7	28	21.2	56	21.5	27	22.0	28	23.5	55	22.7

Completion Tasks
Small Quantity Cooking and Baking

(Based on total criteria rated for each food item)

	ICI GROUPS						SELF-PACED GROUPS					
	Cycle 1		Cycle 2		Combined		Cycle 1		Cycle 2		Combined	
	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%
Criteria Rated N=	390		396		786		369		357		726	
DLP	38	9.7	51	12.9	89	11.3	40	10.8	23	6.4	63	8.7
MALP	290	74.4	287	72.5	577	73.4	268	72.6	267	74.8	535	73.7
NOGO	62	15.9	58	14.6	120	15.3	61	16.5	67	18.8	128	17.6

DLP = Performed or rated at the desired level of performance.

MALP = Performed or rated at or above the minimum acceptable level of performance.

NOGO = Performed or rated below the minimum acceptable level of performance.

STUDENT ACHIEVEMENT

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Procedures Ratings
Small Quantity Cooking and Baking
(Based on average rating for each student)

	ICI GROUPS						SELF-PACED GROUPS					
	Cycle 1		Cycle 2		Combined		Cycle 1		Cycle 2		Combined	
	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%
Students Rated N=	32		30		62		29		28		57	
DLP	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
MALP	30	93.8	25	83.3	55	88.7	26	89.7	21	75.0	47	82.5
NOGO	2	2.2	5	16.7	7	11.3	3	10.3	7	25.0	10	17.5

Procedures Ratings
Small Quantity Cooking and Baking
(Based on total criteria rated for each student)

	ICI GROUPS						SELF-PACED GROUPS					
	Cycle 1		Cycle 2		Combined		Cycle 1		Cycle 2		Combined	
	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%
Criteria Rated N=	339		330		669		301		308		609	
DLP	98	28.9	25	7.6	123	18.4	54	17.9	19	6.2	73	12.0
MALP	193	56.9	260	78.8	453	67.7	207	68.8	236	76.6	443	72.7
NOGO	48	14.2	45	13.6	93	13.9	40	13.3	53	17.2	93	15.3

DLP = Performed or rated at the desired level of performance.

MALP = Performed or rated at or above the minimum acceptable level of performance.

NOGO = Performed or rated below the minimum acceptable level of performance.

STUDENT ACHIEVEMENT

Confidence/Attitude Indicator Ratings
Small Quantity Cooking and Baking

(Based on average rating for each student)

	ICI GROUPS						SELF-PACED GROUPS					
	Cycle 1		Cycle 2		Combined		Cycle 1		Cycle 2		Combined	
	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%
Students	32		30		62		29		28		57	
Rated N=												
DLP	3	9.4	0	0.0	3	4.8	0	0.0	0	0.0	0	0.0
MALP	26	81.3	30	100.0	56	90.3	26	89.7	27	96.4	53	93.0
NOGO	3	9.4	0	0.0	3	4.8	3	10.3	1	3.6	4	7.0

Confidence/Attitude Indicator Ratings
Small Quantity Cooking and Baking

(Based on total criteria rated for each student)

	ICI GROUPS						SELF-PACED GROUPS					
	Cycle 1		Cycle 2		Combined		Cycle 1		Cycle 2		Combined	
	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%
Criteria	155		150		305		142		139		281	
Rated N=												
DLP	50	32.3	17	11.3	67	22.0	18	12.7	12	8.6	30	10.7
MALP	90	58.1	122	81.3	212	69.5	109	76.8	116	83.5	225	80.1
NOGO	15	9.6	11	7.3	26	8.5	15	10.5	11	7.9	26	9.2

DLP = Performed or rated at the desired level of performance.

MALP = Performed or rated at or above the minimum acceptable level of performance.

NOGO = Performed or rated below the minimum acceptable level of performance.

STUDENT ACHIEVEMENT

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Cooking Skills

(Based on average rating for each student)

	ICI GROUPS						SELF-PACED GROUPS					
	Cycle 1		Cycle 2		Combined		Cycle 1		Cycle 2		Combined	
	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%
Students Rated N=	14		10		24		14		12		26	
DLP	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
MALP	10	71.4	5	50.0	15	62.5	9	64.3	6	50.0	15	57.7
NOGO	4	28.6	5	50.0	9	37.5	5	35.7	6	50.0	11	42.3

Cooking Skills

(Based on total criteria rated for each student)

	ICI GROUPS						SELF-PACED GROUPS					
	Cycle 1		Cycle 2		Combined		Cycle 1		Cycle 2		Combined	
	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%
Criteria Rated N=	70		50		120		70		60		130	
DLP	6	8.6	2	4.0	8	6.7	6	8.6	5	8.3	11	8.5
MALP	50	71.4	31	62.0	81	67.5	48	68.6	43	71.7	91	70.0
NOGO	14	20.0	17	34.0	31	25.8	16	22.8	12	20.0	28	21.5

DLP = Performed or rated at the desired level of performance.

MALP = Performed or rated at or above the minimum acceptable level of performance.

NOGO = Performed or rated below the minimum acceptable level of performance.

STUDENT ACHIEVEMENT

Garrison Equipment

(Based on average rating for each equipment item)

Equip Rated N=	ICI GROUPS						SELF-PACED GROUPS					
	Cycle 1		Cycle 2		Combined		Cycle 1		Cycle 2		Combined	
	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%
	30		31		61		23		27		50	
DLP	0	0.0	1	3.2	1	1.6	0	0.0	0	0.0	0	0.0
MALP	23	76.7	24	77.4	47	77.0	8	34.8	8	29.6	16	32.0
NOGO	7	23.3	6	19.4	13	21.3	15	65.2	19	70.4	34	68.8

Garrison Equipment

(Based on total criteria rated for each equipment item)

Criteria Rated N=	ICI GROUPS						SELF-PACED GROUPS					
	Cycle 1		Cycle 2		Combined		Cycle 1		Cycle 2		Combined	
	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%
	447		465		912		345		405		750	
DLP	106	23.7	67	14.4	173	19.0	22	6.4	0	0.0	22	2.9
MALP	268	60.0	349	75.1	517	56.7	188	54.5	214	52.8	402	53.6
NOGO	73	16.3	49	10.5	122	13.3	135	39.1	191	47.2	326	43.5

DLP = Performed or rated at the desired level of performance.

MALP = Performed or rated at or above the minimum acceptable level of performance.

NOGO = Performed or rated below the minimum acceptable level of performance.

STUDENT ACHIEVEMENT

B-19

Recipe Conversion

(Based on total number of items correct)

NUMBER CORRECT	Cycle 1		ICI GROUPS Cycle 2		Combined		SELF-PACED GROUPS Cycle 1		Cycle 2		Combined	
	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%	TOT	%
0-3	4	25.0	7	43.8	11	34.4	5	35.7	3	21.4	8	28.6
4-7	7	43.8	1	6.3	8	25.0	6	42.9	5	35.7	11	39.3
8-11	5	31.3	3	18.8	8	25.0	2	14.3	2	14.3	4	14.3
12-15	0	0.0	3	18.8	8	9.4	0	0.0	4	28.6	4	14.3
15-19	0	0.0	2	12.5	2	6.3	1	7.1	0	0.0	1	3.6
Students N	16		16		32		14		14		28	

COMBINED RATINGS

Cycle 1 -- Cycle 2

Frequency of Rating Scores

Completion Tasks
Procedures
Confidence/Attitude Indicators
Cooking Skills
Garrison Equipment
Recipe Conversion

Key to Rating Scale

- 0 - Not present (not done)
- 1 - Present (done) but not minimally acceptable
- 2 - Present (done) but only minimally acceptable (MALP).
- 3 - Present (done) above MALP.
- 4.- Present (done) at desired level for given conditions (DLP).

FREQUENCY OF RATING SCORES
Completion Tasks -- Food Items
Small Quantity Cooking and Baking

FOOD ITEM	ICI GROUP					ICI GROUP					ICI GROUP				
	Cycle 1 N=129					Cycle 2 N=132					Combined N=261				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
1 Salad	0	2	12	2	0	0	3	10	1	1	0	5	22	3	1
2 Soup	0	5	7	3	0	0	2	9	2	0	0	7	16	5	0
3 Entre	0	4	8	2	0	0	5	8	2	0	0	9	16	4	0
4 Vegetable	0	3	6	3	0	0	6	5	3	0	0	9	11	6	0
5 Baking Powder Biscuits	0	7	6	2	0	1	4	4	4	2	1	11	10	6	2
6 Plain Muffins	0	4	6	3	0	0	3	10	2	0	0	7	16	5	0
7 French Toast	0	2	8	1	0	0	1	3	1	0	0	3	11	2	0
8 Plain Omelet	0	0	2	2	0	0	1	6	3	0	0	1	8	5	0
9 Chocolate Cake	0	1	6	6	2	0	1	4	8	2	0	2	10	14	4
10 Butter Cream Frosting	0	0	4	7	3	1	0	7	5	2	1	0	11	12	5
TOTAL	0	28	65	31	5	2	26	66	31	7	2	54	131	62	12
PERCENT OF TOTAL	0.0	21.7	50.4	24.0	3.9	1.5	19.7	50.0	23.5	5.3	0.8	20.7	50.2	23.8	4.6

FOOD ITEM	SELF-PACED GROUP					SELF-PACED GROUP					SELF-PACED GROUP				
	Cycle 1 N=123					Cycle 2 N=119					Combined N= 242				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
1 Salad	0	4	7	3	0	0	3	6	1	1	0	7	13	4	1
2 Soup	0	2	9	2	0	0	4	5	2	0	0	6	14	4	0
3 Entre	0	2	7	5	0	0	2	10	2	0	0	4	17	7	0
4 Vegetable	0	4	7	2	1	0	4	6	4	0	0	8	13	6	1
5 Baking Powder Biscuits	0	7	6	0	0	1	7	5	1	0	1	14	11	1	0
6 Plain Muffins	0	4	6	3	0	0	5	6	3	0	0	9	12	6	0
7 French Toast	0	1	3	0	0	0	2	6	2	1	0	3	9	2	1
8 Plain Omelet	0	1	7	2	0	0	0	4	0	0	0	1	11	2	0
9 Chocolate Cake	1	1	2	5	5	0	0	7	5	1	1	1	9	10	6
10 Butter Cream Frosting	0	0	9	11	1	0	0	10	2	1	0	0	19	13	2
TOTAL	1	26	63	26	7	1	27	65	22	4	2	53	128	48	11
PERCENT OF TOTAL	0.8	21.1	51.2	21.1	5.7	0.8	22.7	54.6	18.5	3.4	0.8	21.9	52.9	19.8	4.5

FREQUENCY OF RATING SCORES

B-23

Completion Tasks -- Food Items
Small Quantity Cooking and Baking

CRITERION	ICI GROUP					ICI GROUP					ICI GROUP				
	Cycle 1 N = 390					Cycle 2 N = 396					Combined N = 786				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
CRITERION 1--Taste/Flavor	0	14	42	50	14	2	11	50	51	18	2	25	92	111	32
CRITERION 2--Appearance	0	21	60	34	15	2	30	59	37	14	2	41	119	71	29
CRITERION 3--Texture	0	27	47	47	9	2	21	53	37	19	2	48	100	84	28
TOTAL	0	62	149	141	38	6	52	162	125	51	6	114	311	266	89
PERCENT OF TOTAL	0.0	16.0	38.2	36.2	9.7	1.5	13.1	40.9	31.6	12.9	0.8	14.5	39.6	33.8	11.3

CRITERION	SELF-PACED GROUP					SELF-PACED GROUP					SELF-PACED GROUP				
	Cycle 1 N = 369					Cycle 2 N = 357					Combined N = 726				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
CRITERION 1--Taste/Flavor	1	13	47	50	12	1	19	48	46	5	2	32	95	96	17
CRITERION 2--Appearance	1	23	52	33	14	1	21	61	27	9	2	44	113	60	23
CRITERION 3--Texture	1	22	47	39	14	1	24	50	35	9	2	46	97	74	23
TOTAL	3	58	146	122	40	3	64	159	108	23	6	122	305	230	63
PERCENT OF TOTAL	0.8	15.7	39.6	33.1	10.8	0.8	17.9	44.5	30.3	6.4	0.8	16.8	42.0	31.7	8.7

FREQUENCY OF RATING SCORES
Procedures
Small Quantity Cooking and Baking

CRITERION	ICI GROUP					ICI GROUP					ICI GROUP				
	Cycle 1 N=339					Cycle 2 N=330					Combined N=669				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
CRITERION 1--Washed hands.	1	1	0	6	18	1	0	8	12	9	2	1	0	18	27
CRITERION 2--Read recipe.	0	4	7	5	16	0	3	10	13	4	0	7	17	18	20
CRITERION 3--Checked equipment	2	1	3	13	12	0	1	13	15	1	2	2	16	28	13
CRITERION 4--Assembled utensils	0	1	4	18	9	0	2	13	12	3	0	3	17	30	12
CRITERION 5--Assembled ingred.	0	1	8	9	14	0	2	13	12	3	0	3	21	21	17
CRITERION 6--Followed recipe	1	3	11	9	6	0	4	18	8	0	1	7	29	17	6
CRITERION 7--Sanitation & Safety	1	4	12	11	4	0	9	12	8	1	1	13	24	19	5
CRITERION 8--No waste	0	6	7	11	8	2	2	8	15	3	2	8	15	26	11
CRITERION 9--Cooking skills	1	5	13	8	4	1	8	12	9	0	2	13	25	17	4
CRITERION 10--Clean as you go	1	8	7	13	1	0	4	16	10	0	1	12	23	23	1
CRITERION 11--Cleaned after task	0	7	7	11	6	1	5	10	13	1	1	12	17	24	7
TOTAL	7	41	79	114	98	5	40	133	127	25	12	81	212	241	123
PERCENT OF TOTAL	2.1	12.1	23.3	33.6	28.9	1.5	12.1	40.3	38.5	7.6	1.5	12.1	31.7	36.0	18.4

CRITERION	SELF-PACED					SELF-PACED					SELF-PACED				
	Cycle 1 N=301					Cycle 2 N=308					Combined N=609				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
CRITERION 1--Washed Hands.	0	2	1	2	15	0	1	6	14	7	0	3	7	16	22
CRITERION 2--Read recipe	0	2	10	11	6	0	4	11	12	1	0	6	21	23	7
CRITERION 3--Checked equipment	0	0	11	13	5	1	3	11	11	2	1	3	22	24	7
CRITERION 4--Assembled utensils	0	1	11	12	4	0	2	11	12	3	0	3	22	24	7
CRITERION 5--Assembled ingred.	0	2	8	9	9	0	1	13	12	2	0	3	21	21	11
CRITERION 6--Followed recipe	1	7	10	5	5	0	10	10	8	0	1	17	20	13	5
CRITERION 7--Sanitation & safety	0	4	17	8	0	1	8	14	5	0	1	12	31	13	0
CRITERION 8--No waste	0	2	10	10	5	0	2	12	12	2	0	4	22	22	7
CRITERION 9--Cooking skills	0	4	15	6	2	0	8	10	10	0	0	12	25	16	2
CRITERION 10--Clean as you go	1	7	14	7	0	1	6	15	5	1	2	13	29	12	1
CRITERION 11--Cleaned after task	0	7	7	10	3	1	4	14	8	1	1	11	21	18	4
TOTAL	2	38	114	93	54	4	49	127	109	19	6	87	241	202	73
PERCENT OF TOTAL	0.6	12.6	37.8	30.8	17.9	1.3	15.9	41.3	35.4	6.2	1.0	14.3	35.1	33.2	12.0

FREQUENCY OF RATING SCORES

B-25

Confidence/Attitude Indicators
Small Quantity Cooking and Baking

CRITERION	ICI GROUP					ICI GROUP					ICI GROUP				
	Cycle 1 N=155					Cycle 2 N=150					Combined N=305				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
CRITERION 1--Proceeded without false starts	1	2	6	11	12	0	2	8	16	4	1	4	14	27	16
CRITERION 2--Attended to own actions.	0	4	6	11	9	0	2	6	19	3	0	6	12	30	12
CRITERION 3--Stayed focused on task.	1	2	4	14	10	0	2	7	15	6	1	4	11	29	16
CRITERION 4--Remained cool under fire.	2	1	2	14	10	0	0	11	17	2	2	1	13	31	12
CRITERION 5--Showed concern for quality.	1	1	12	8	9	0	5	7	16	2	1	6	19	24	11
TOTAL	5	10	30	60	50	0	11	39	83	17	5	21	69	143	67
PERCENT OF TOTAL	3.2	6.5	19.4	38.7	32.3	1.0	7.3	26.0	53.3	11.3	1.6	6.9	22.6	46.9	22.0

CRITERION	SELF-PACED					SELF-PACED					SELF-PACED				
	Cycle 1 N=142					Cycle 2 N=139					Combined N=281				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
CRITERION 1--Proceeded without false starts.	0	2	9	15	3	0	2	10	14	2	0	4	19	29	5
CRITERION 2--Attended to own actions.	0	4	8	16	1	0	1	9	14	4	0	5	17	30	5
CRITERION 3--Stayed focused on task.	0	4	8	12	5	0	1	6	19	2	0	5	14	31	7
CRITERION 4--Remained cool under fire.	0	1	8	15	4	0	0	12	15	1	0	1	30	30	5
CRITERION 5--Showed concern for quality.	0	4	10	8	5	0	7	8	9	3	0	11	18	17	8
TOTAL	1	15	43	55	18	0	11	45	71	12	0	26	88	137	30
PERCENT OF TOTAL	0.0	10.6	30.2	46.5	12.7	0.0	7.9	32.4	51.1	8.6	0.0	9.3	31.3	48.8	10.7

FREQUENCY OF RATING SCORES

Cooking Skills

CRITERION	ICI GROUP					ICI GROUP					ICI GROUP				
	Cycle 1 N=70					Cycle 2 N=50					Combined N=120				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
CRITERION 1--Finely shredded fresh cabbage.	0	3	7	3	1	0	3	5	2	0	0	6	12	5	1
CRITERION 2--Diced fresh sweet pepper (1/2 inch).	0	3	4	7	0	0	5	3	2	0	0	8	7	9	0
CRITERION 3--Sliced fresh pared cucumber (1/8 inch).	1	2	3	7	1	0	0	7	2	1	0	1	10	9	4
CRITERION 4--Cutting tomato wedges (8).	0	1	3	7	3	0	0	7	2	1	0	1	10	9	4
CRITERION 5--Making a brown roux.	0	4	5	4	1	2	3	4	0	1	2	7	9	4	2
TOTAL	1	13	22	28	6	2	15	22	9	2	3	28	44	37	8
PERCENT OF TOTAL	1.4	18.6	31.4	40.0	8.6	4.0	30.0	44.0	18.0	4.0	2.5	23.3	36.7	30.8	6.7

CRITERION	SELF-PACED					SELF-PACED					SELF-PACED				
	Cycle 1 N=70					Cycle 2 N=60					Combined N=130				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
CRITERION 1--Finely shredded fresh cabbage.	1	1	5	6	1	0	0	10	1	1	1	1	15	7	2
CRITERION 2--Diced fresh sweet pepper (1/2 inch).	0	3	8	3	0	0	2	8	1	1	0	5	16	4	1
CRITERION 3--Sliced fresh pared cucumber (1/8 inch).	0	4	2	6	2	1	1	5	4	1	1	5	7	10	3
CRITERION 4--Cutting tomato wedges (8).	0	3	8	1	2	0	5	4	2	1	0	8	12	3	3
CRITERION 5--Making a brown roux.	1	3	5	4	1	2	1	7	1	1	3	4	12	5	2
TOTAL	2	14	28	20	6	3	9	34	9	5	5	23	62	29	11
PERCENT OF TOTAL	2.9	20.0	40.0	28.6	8.6	5.0	15.0	56.7	15.0	8.3	2.8	17.7	47.7	22.3	8.5

FREQUENCY OF RATING SCORES

8-27

Garrison Equipment
(Based on individual ratings for each criterion.)

CRITERION	ICI GROUP					ICI GROUP					ICI GROUP				
	Cycle 1 N=447					Cycle 2 N=465					Combined N=912				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
1. Checked equipment	1	3	7	11	8	0	1	12	12	3	1	4	19	26	11
2. Explained checking purpose	1	1	10	10	8	0	1	10	16	4	1	2	20	26	12
3. Observed safety precautions	1	3	7	10	9	0	4	10	11	6	1	7	17	21	15
4. Explained safety precautions	1	0	8	13	8	0	1	12	12	6	1	1	20	25	14
5. Started equipment properly	3	4	6	9	8	0	2	15	9	5	3	6	21	18	13
6. Operated equipment properly	3	3	7	9	8	0	3	16	7	5	3	6	23	16	13
7. Explained starting procedures	3	2	11	5	8	0	3	11	13	4	3	5	22	18	12
8. Stopped equipment properly	1	4	9	7	9	0	1	14	11	5	1	5	23	18	14
9. Explained stopping procedures	1	2	11	10	6	0	1	16	10	4	1	3	27	20	10
10. Disassembled properly	4	2	9	9	6	1	4	9	13	4	5	6	18	22	10
11. Explained disassembling	1	1	13	8	7	1	4	8	13	5	2	5	21	21	12
12. Cleaned equipment properly	4	8	7	4	7	0	6	12	10	3	4	14	19	14	10
13. Explained cleaning procedure	2	8	7	10	3	0	7	9	12	3	2	15	16	22	6
14. Reassembled equip. properly	1	2	14	7	6	0	5	11	10	5	1	7	25	17	11
15. Explained reassembling	1	2	15	5	5	0	4	12	10	5	1	6	27	15	10
TOTAL	28	45	141	127	106	2	47	177	172	67	30	92	318	299	173
PERCENT OF TOTAL	6.3	10.1	31.8	28.6	23.9	0.4	10.1	38.1	37.0	14.4	3.3	10.1	34.9	32.8	19.0

CRITERION	SELF-PACED					SELF-PACED					SELF-PACED				
	Cycle 1 N=345					Cycle 2 N=405					Combined N=750				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
1. Checked equipment	1	8	10	3	1	1	9	13	4	0	2	17	23	7	1
2. Explained checking purpose	2	4	11	6	0	1	8	13	5	0	3	12	24	11	0
3. Observed safety precautions	5	4	10	3	1	2	8	11	6	0	7	12	21	9	1
4. Explained safety precautions	3	2	13	4	1	2	7	11	7	0	5	9	24	11	1
5. Started equipment properly	4	8	5	2	4	4	10	12	1	0	8	18	17	3	4
6. Operated equipment properly	5	7	5	3	3	5	9	12	1	0	10	16	17	4	3
7. Explained starting procedures	5	8	5	4	1	3	13	9	2	0	8	21	14	6	1
8. Stopped equipment properly	3	4	8	5	2	4	13	8	2	0	7	18	16	7	2
9. Explained stopping procedure	3	4	11	2	3	3	10	12	2	0	6	14	23	4	3
10. Disassembled properly	5	5	8	4	1	1	14	8	4	0	6	19	16	8	1
11. Explained disassembling	4	5	9	4	1	4	8	10	5	0	8	13	19	9	1
12. Cleaned equipment properly	3	7	10	2	1	5	8	10	4	0	8	15	20	6	1
13. Explained cleaning proced.	3	6	9	3	1	5	9	10	3	0	8	15	19	6	1
14. Reassembled equip. properly	4	3	13	1	2	3	10	11	3	0	7	13	24	4	2
15. Explained reassembling	4	4	4	4	0	3	9	12	3	0	7	13	16	7	0
TOTAL	54	80	138	50	22	46	145	162	52	0	101	225	300	102	22
PERCENT OF TOTAL	15.7	23.3	40.1	14.5	6.4	11.4	35.8	40.0	12.8	0.0	13.5	30.0	40.0	13.6	2.9

FREQUENCY OF RATING SCORES

Garrison Equipment
Based on average ratings for each equipment item

EQUIPMENT ITEM	ICI GROUP					ICI GROUP					ICI GROUP				
	Cycle 1 N=20					Cycle 2 N=31					Combined N=51				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
Milk Dispenser	0	4	0	0	0	0	0	3	2	0	0	4	3	2	0
Hobart Mixer	0	0	1	3	0	0	0	2	2	1	0	0	3	5	1
Coffee Urn	0	0	2	2	0	0	2	2	0	0	0	2	4	2	0
Meat Slicer	0	0	3	2	0	0	2	1	0	0	0	2	4	2	0
Deep Fat Fryer	1	1	0	0	0	0	2	1	0	0	1	3	2	0	0
Convection Oven	0	1	2	2	0	0	1	2	0	0	0	2	4	2	0
Ice Cream Machine	0	0	0	3	0	0	0	2	0	0	0	0	2	3	0
Gas Griddle	0	0	2	1	0	0	0	6	0	0	0	0	8	1	0
TOTAL	1	6	10	13	0	0	7	19	4	1	1	13	29	17	1
PERCENT OF TOTAL	3.3	20.0	33.3	43.3	0.0	0.0	22.6	61.3	12.9	3.2	1.6	21.3	47.5	27.9	1.6

EQUIPMENT ITEM	SELF-PACED					SELF-PACED					SELF-PACED				
	Cycle 1 N=23					Cycle 2 N=27					Combined N=50				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
Milk Dispenser	1	1	1	0	0	0	1	2	0	0	1	2	3	0	0
Hobart Mixer	0	0	1	1	0	0	2	1	0	0	0	2	2	1	0
Coffee Urn	1	3	1	0	0	2	1	0	0	0	3	4	1	0	0
Meat Slicer	0	1	1	1	0	1	2	0	0	0	1	3	1	1	0
Deep Fat Fryer	1	1	0	0	0	1	1	0	0	0	2	2	0	0	0
Convection Oven	1	2	0	0	0	0	3	2	0	0	1	5	2	0	0
Ice Cream Machine	1	1	0	0	0	1	4	0	0	0	2	5	0	0	0
Gas Griddle	0	1	2	0	0	0	0	3	0	0	0	1	5	0	0
TOTAL	5	10	6	2	0	5	14	8	0	0	10	24	14	2	0
PERCENT OF TOTAL	21.7	43.5	26.0	8.7	0.0	18.5	51.9	29.6	0.0	0.0	20.0	48.0	28.0	4.0	0.0

FREQUENCY OF RATING SCORES

B-29

Garrison Equipment
(Based on individual ratings for each equipment item.)

EQUIPMENT ITEM	ICI GROUP					ICI GROUP					ICI GROUP				
	Cycle 1 N=447					Cycle 2 N=465					Combined N=912				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
Milk Dispenser	3	21	37	0	0	0	1	13	34	27	3	22	50	34	27
Hobart Mixer	4	3	6	18	28	0	2	21	16	36	4	5	27	34	64
Coffee Urn	0	0	24	31	6	2	18	34	6	0	2	18	58	37	6
Meat Slicer	3	5	13	24	29	0	10	27	8	0	3	15	40	32	29
Deep Fat Fryer	16	6	6	0	0	0	11	25	9	0	16	17	31	9	0
Convection Oven	2	5	32	26	11	0	0	18	26	1	2	5	50	52	12
Ice Cream Machine	0	3	7	13	21	0	4	14	9	3	0	7	21	22	24
Gas Griddle	0	2	16	15	11	0	1	25	64	0	0	3	41	79	11
TOTAL	28	45	141	127	106	2	47	177	172	67	30	92	318	299	173
PERCENT OF TOTAL	6.3	10.1	31.8	28.6	23.9	0.4	10.1	38.1	37.0	14.4	3.3	10.1	34.9	32.8	19.0

EQUIPMENT ITEM	SELF-PACED					SELF-PACED					SELF-PACED				
	Cycle 1 N=345					Cycle 2 N=405					Combined N=750				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
Milk Dispenser	12	5	16	11	1	0	14	21	10	0	12	19	37	21	1
Hobart Mixer	2	1	2	9	16	2	6	33	4	0	4	7	35	13	16
Coffee Urn	16	21	32	6	0	16	25	4	0	0	32	46	36	6	0
Meat Slicer	1	5	20	14	5	2	31	12	0	0	3	36	32	14	5
Deep Fat Fryer	6	18	6	0	0	14	16	0	0	0	20	34	6	0	0
Convection Oven	11	14	20	0	0	0	14	55	6	0	11	28	75	6	0
Ice Cream Machine	7	13	10	0	0	12	39	17	7	0	19	52	27	7	0
Gas Griddle	0	3	32	10	0	0	0	20	25	0	0	3	52	35	0
TOTAL	55	80	138	50	22	46	145	162	52	0	101	225	300	102	22
PERCENT OF TOTAL	15.9	23.2	40.0	14.5	6.4	11.4	35.8	40.0	12.8	0.0	13.5	30.0	40.0	13.6	2.9

FREQUENCY OF RAW SCORES

Recipe Conversion

Number Correct	ICI GROUPS			SELF-PACED GROUPS		
	Cycle 1	Cycle 2	Combined	Cycle 1	Cycle 2	Combined
	N=16	N=16	N=32	N=14	N=14	N=28
0	2	3	5	2	1	3
1	1	2	3	2	1	3
2	0	1	1	1	0	1
3	1	1	2	0	1	1
4	1	1	2	2	0	2
5	2	0	2	2	1	3
6	2	0	2	1	2	3
7	2	0	2	1	2	3
8	2	2	4	1	2	3
9	1	0	1	1	0	1
10	0	1	1	0	0	0
11	2	0	2	0	0	0
12	0	1	1	0	2	2
13	0	0	0	0	1	1
14	0	2	2	0	0	0
15	0	0	0	0	1	1
16	0	0	0	1	0	1
17	0	0	0	0	0	0
18	0	2	2	0	0	0
19	0	0	0	0	0	0

COMBINED RATINGS
Cycle 1 -- Cycle 2

Rating Tabulation Summaries

Completion Tasks
Procedures
Confidence/Attitude Indicators
Cooking Skills
Garrison Equipment

Key to Tabulation Categories

N - Total number of individual criterion rated.
TOT - Sum of ratings on all criteria.
AVG - Mean score of all ratings (TOT divided by N)
% - Percent of possible score (Possible = N times 4)

COMPLETION TASK RATINGS

Small Quantity Cooking and Baking
Summary by Food Item

	ICI Cycle 1				ICI Cycle 2				ICI COMBINED			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Salad	118	48	2.5	61.5	102	45	2.3	56.7	220	93	2.4	59.1
Soup	98	45	2.2	54.4	86	39	2.2	55.1	184	84	2.2	54.8
Entre	98	45	2.1	54.4	97	45	2.2	53.9	195	90	2.2	54.2
Vegetable	79	36	2.2	54.9	87	42	2.1	51.8	166	78	2.1	53.2
COOKING ITEMS	393	174	2.3	56.5	372	171	2.2	54.4	765	345	2.2	55.4
Biscuits	87	45	1.9	48.3	109	45	2.4	60.6	196	90	2.2	54.4
Muffins	84	39	2.2	53.8	99	45	2.2	55.0	183	84	2.2	54.5
French Toast	72	33	2.2	54.5	34	15	2.3	56.7	106	48	2.2	55.2
Omelet	35	12	2.9	72.9	73	30	2.4	60.8	108	42	2.6	64.3
Chocolate Cake	132	45	2.9	73.3	146	45	3.2	81.1	278	90	3.1	77.2
Frosting	130	42	3.1	77.4	125	45	2.8	65.4	255	87	2.9	73.3
BAKING ITEMS	540	216	2.5	67.5	586	225	2.6	65.1	1126	441	2.6	63.8
GROUP TOTALS	933	390	2.4	59.8	958	396	2.4	60.5	1891	786	2.4	60.1

	Self-Paced Cycle 1				Self-Paced Cycle 2				Self-Paced Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Salad	101	42	2.4	60.1	71	33	2.2	53.8	172	75	2.3	57.3
Soup	92	39	2.4	59.0	71	33	2.2	53.8	163	72	2.3	56.6
Entre	105	42	2.5	62.5	93	42	2.2	55.4	198	84	2.4	58.9
Vegetable	95	42	2.3	56.5	92	42	2.2	54.8	187	84	2.2	55.7
COOKING ITEMS	393	165	2.4	59.5	327	150	2.2	54.5	720	315	2.3	57.1
Biscuits	65	39	1.7	41.7	68	42	1.6	40.5	133	81	1.6	41.0
Muffins	87	39	2.2	55.8	90	42	2.1	53.6	177	81	2.2	54.6
French Toast	27	12	2.3	56.3	80	33	2.4	60.8	107	45	2.4	59.4
Omelet	69	30	2.3	57.5	28	12	2.3	58.3	97	42	2.3	57.7
Chocolate Cake	126	42	3.0	75.0	109	39	2.8	69.9	235	81	2.9	72.5
Frosting	107	42	2.5	63.7	97	39	2.5	62.2	204	81	2.5	63.0
BAKING ITEMS	481	204	2.4	58.9	472	207	2.3	57.0	953	411	2.3	58.0
GROUP TOTALS	874	369	2.4	59.2	799	357	2.2	56.0	1673	726	2.3	57.6

COMPLETION TASK RATINGS

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Small Quantity Cooking and Baking

Summary by Criterion

	ICI Cycle 1				ICI CYCLE 2				ICI Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Cooking	141	58	2.4	60.8	132	57	2.3	57.9	272	115	2.4	59.3
Baking	193	72	2.7	67.0	204	75	2.7	68.0	397	147	2.7	67.5
CRITERION 1 =	334	130	2.6	64.2	336	132	2.5	63.6	670	262	2.6	66.5
Cooking	128	58	2.2	55.2	120	57	2.1	52.6	248	115	2.2	53.9
Baking	174	72	2.4	60.4	188	75	2.5	62.7	362	147	2.5	61.6
CRITERION 2 =	302	130	2.3	58.1	308	132	2.3	58.3	610	262	2.3	60.5
Cooking	124	58	2.1	53.4	120	57	2.1	52.6	244	115	2.1	53.0
Baking	173	72	2.4	60.1	194	75	2.6	64.7	367	147	2.5	62.4
CRITERION 3 =	297	130	2.3	57.1	314	132	2.4	59.5	611	262	2.3	60.6
Cooking Total	393	174	2.3	56.5	372	171	2.2	54.4	765	345	2.2	55.4
Baking Total	540	216	2.5	67.5	586	225	2.6	65.1	1126	441	2.6	63.8
GROUP TOTAL =	933	390	2.4	59.8	958	396	2.4	60.5	1891	786	2.4	60.1

	Self-Paced Cycle 1				Self-Paced Cycle 2				Self-Paced Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Cooking	136	55	2.5	61.8	109	50	2.2	54.5	245	105	2.3	58.3
Baking	169	68	2.5	62.1	164	69	2.4	59.4	333	137	2.4	60.8
CRITERION 1 =	305	123	2.5	62.0	273	119	2.3	57.4	578	242	2.4	59.7
Cooking	131	55	2.4	59.5	109	50	2.2	54.5	240	105	2.3	57.1
Baking	150	68	2.2	55.1	151	69	2.2	54.7	301	137	2.2	59.9
CRITERION 2 =	281	123	2.3	57.1	260	119	2.2	54.6	541	242	2.2	55.9
Cooking	126	55	2.3	57.3	109	50	2.2	54.5	235	105	2.2	56.0
Baking	162	68	2.4	59.6	157	69	2.3	56.9	319	137	2.3	58.2
CRITERION 3 =	288	123	2.3	58.5	266	119	2.2	55.9	554	242	2.3	57.2
Cooking Total	393	165	2.4	59.5	327	150	2.2	54.5	720	315	2.3	57.1
Baking Total	481	204	2.4	58.9	472	207	2.3	57.0	953	411	2.3	58.0
GROUP TOTAL =	874	369	2.4	59.2	799	357	2.2	56.0	1673	726	2.3	57.6

PROCEDURES RATINGS
Small Quantity Cooking and Baking

	ICI Cycle 1				ICI Cycle 2				ICI Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
CRITERION 1	91	26	3.5	87.5	88	30	2.9	73.3	179	56	3.2	79.9
2	97	32	3.0	75.8	78	30	2.6	65.0	175	62	2.8	70.6
3	94	31	3.0	75.8	76	30	2.5	63.3	170	61	2.8	69.7
4	99	32	3.1	77.3	76	30	2.5	63.3	175	62	2.8	70.6
5	100	32	3.1	78.1	76	30	2.5	63.3	176	62	2.8	71.0
6	76	30	2.5	63.3	64	30	2.1	53.3	140	60	2.3	58.3
7	77	32	2.4	60.2	61	30	2.0	50.8	138	62	2.2	55.6
8	85	32	2.7	66.4	75	30	2.5	62.5	160	62	2.6	64.5
9	71	31	2.3	57.3	59	30	2.0	49.2	130	61	2.1	52.3
10	65	30	2.2	54.2	66	30	2.2	55.0	131	60	2.2	54.6
11	78	31	2.5	62.9	68	30	2.3	56.7	146	61	2.4	59.8
TOTALS	933	340	2.7	68.6	787	330	2.4	59.6	1720	670	2.6	64.2

	Self-Paced Cycle 1				Self-Paced Cycle 2				Self-Paced Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
CRITERION 1	60	20	3.0	75.0	83	28	3.0	74.1	143	48	3.0	74.5
2	79	29	2.7	68.1	66	28	2.4	58.9	145	57	2.5	63.6
3	81	29	2.8	69.8	66	28	2.4	58.9	147	57	2.6	64.5
4	75	28	2.7	67.0	76	28	2.7	57.9	151	56	2.7	67.4
5	81	28	2.9	72.3	71	28	2.5	63.4	152	56	2.7	67.9
6	66	28	2.4	58.9	54	28	1.9	48.2	120	56	2.1	53.6
7	62	29	2.1	53.4	51	28	1.8	45.5	113	57	2.0	49.6
8	72	27	2.7	66.7	72	28	2.6	64.3	144	55	2.6	65.5
9	60	27	2.2	55.6	58	28	2.1	51.8	118	55	2.1	53.6
10	56	29	1.9	48.3	55	28	2.0	49.1	111	57	1.9	48.7
11	63	27	2.3	58.3	63	28	2.3	56.3	126	55	2.3	57.3
TOTALS	762	302	2.5	63.1	711	308	2.3	57.7	1473	610	2.4	60.4

CONFIDENCE/ATTITUDE INDICATOR RATINGS

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Small Quantity Cooking and Baking

	TOT	ICI Cycle 1			TOT	ICI Cycle 2			TOT	ICI Combined		
		N	AVG	%		N	AVG	%		N	AVG	%
Criterion 1	95	32	3.0	74.2	82	30	2.7	68.3	177	62	2.9	71.4
2	92	32	2.9	71.9	83	30	2.8	69.2	175	62	2.8	70.6
3	92	31	3.0	74.2	85	30	2.8	70.8	177	61	2.9	72.5
4	87	29	3.0	75.0	81	30	2.7	67.5	168	59	2.9	71.2
5	85	31	2.7	68.6	75	30	2.5	62.5	160	61	2.6	65.6
TOTALS	451	155	2.9	72.7	406	150	2.7	67.7	857	305	2.8	70.3

	Self-Paced Cycle 1				Self-Paced Cycle 2				Self-Paced Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Criterion 1	77	29	2.7	66.4	72	28	2.6	64.3	149	57	2.6	65.4
2	72	29	2.5	62.1	77	28	2.8	68.8	149	57	2.6	65.4
3	76	29	2.6	65.5	78	28	2.8	69.6	154	57	2.7	67.5
4	78	28	2.8	69.6	73	28	2.6	65.2	151	56	2.7	67.4
5	68	27	2.5	63.0	65	27	2.4	63.0	133	54	2.5	61.6
TOTALS	371	142	2.6	65.3	342	139	2.5	62.9	713	281	2.5	63.4

COOKING SKILLS RATINGS

	TOT	ICI Cycle 1				TOT	ICI Cycle 2				ICI Combined			
		N	AVG	%	N		AVG	%	TOT	N	AVG	%		
Criterion 1	30	14	2.1	53.6	19	10	1.9	47.5	49	24	2.0	51.0		
2	32	14	2.3	57.1	17	10	1.7	42.5	49	24	2.3	54.2		
3	33	14	2.4	58.9	19	10	1.9	47.5	52	24	2.3	54.2		
4	40	14	2.9	71.4	24	10	2.4	60.0	64	24	2.8	66.7		
5	30	14	2.1	53.6	15	10	1.5	37.5	45	24	1.9	46.9		
TOTALS	165	70	2.4	58.9	94	50	1.9	47.0	259	120	2.2	54.0		

	Self-Paced Cycle 1				TOT	Self-Paced Cycle 2				TOT	Self-Paced Combined			
	TOT	N	AVG	%		TOT	N	AVG	%		TOT	N	AVG	%
Criterion 1	33	14	2.4	58.9	27	12	2.3	56.3	60	26	2.3	57.7		
2	28	14	2.0	50.0	25	12	2.1	52.1	53	26	2.0	51.0		
3	34	14	2.4	60.7	27	12	2.3	56.3	61	26	2.4	58.7		
4	30	14	2.1	53.6	23	12	1.9	47.9	53	26	2.0	51.0		
5	29	14	2.1	51.8	22	12	1.8	45.8	51	26	1.9	49.0		
TOTALS	154	70	2.2	55.0	124	60	2.1	51.7	278	130	2.1	53.5		

COMPLETION TASK RATINGS

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Garrison Equipment

	TOT	ICI Cycle 1			TOT	ICI Cycle 2			ICI Combined			
		N	AVG	%		N	AVG	%	TOT	N	AVG	%
Criterion 1	82	30	2.7	68.3	82	31	2.6	66.1	164	61	2.7	67.2
2	85	30	2.8	70.8	85	31	2.7	68.5	170	61	2.8	69.7
3	81	30	2.7	67.5	81	31	2.6	65.3	162	61	2.7	66.4
4	87	30	2.9	72.5	85	31	2.7	68.5	172	61	2.8	70.5
5	75	30	2.5	62.5	79	31	2.5	63.7	154	61	2.5	63.1
6	76	30	2.5	63.3	76	31	2.5	61.3	152	61	2.5	62.3
7	75	30	2.5	62.5	80	31	2.6	64.5	155	61	2.5	63.5
8	79	30	2.6	65.8	82	31	2.6	66.1	161	61	2.6	66.0
9	78	30	2.6	65.0	79	31	2.5	63.7	157	61	2.6	64.3
10	71	30	2.4	59.2	77	31	2.5	62.1	148	61	2.4	60.7
11	79	30	2.6	65.8	79	31	2.5	63.7	158	61	2.6	64.8
12	62	30	2.1	51.7	72	31	2.3	58.1	134	61	2.2	54.9
13	64	30	2.1	53.3	73	31	2.4	58.9	137	61	2.2	56.1
14	75	30	2.5	62.5	77	31	2.5	62.1	152	61	2.5	62.3
15	71	30	2.4	59.2	78	31	2.5	62.9	149	61	2.4	61.1
TOTALS	1142	450	2.5	63.1	1185	465	2.5	63.7	2327	915	2.5	63.6

	Self-Paced Cycle 1				Self-Paced Cycle 2				Self-Paced Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Criterion 1	37	23	1.6	40.2	47	27	1.7	43.5	84	50	1.7	42.0
2	44	23	1.9	47.8	49	27	1.8	45.4	93	50	1.9	46.5
3	37	23	1.6	40.2	48	27	1.8	44.4	85	50	1.7	42.5
4	44	23	1.9	47.8	50	27	1.9	46.3	94	50	1.9	47.0
5	40	23	1.7	43.5	37	27	1.4	34.3	77	50	1.5	38.5
6	38	23	1.7	41.3	36	27	1.3	33.3	74	50	1.5	37.0
7	34	23	1.5	37.0	37	27	1.4	34.3	71	50	1.4	35.5
8	44	23	1.9	47.8	35	27	1.3	32.4	79	50	1.6	39.5
9	44	23	1.9	47.8	40	27	1.5	37.0	84	50	1.7	42.0
10	37	23	1.6	40.2	42	27	1.6	38.9	79	50	1.6	39.5
11	39	23	1.7	42.4	43	27	1.6	39.8	82	50	1.6	41.0
12	37	23	1.6	40.2	40	27	1.5	37.0	77	50	1.5	38.5
13	37	23	1.6	40.2	38	27	1.4	35.2	75	50	1.5	37.5
14	40	23	1.7	43.5	41	27	1.5	38.0	81	50	1.6	40.5
15	38	23	1.7	41.3	42	27	1.6	38.9	80	50	1.6	40.0
TOTALS	594	345	1.6	43.1	625	405	1.5	38.6	1219	750	1.6	40.6

COMPLETION TASK RATINGS
Garrison Equipment
Ratings for Each Equipment Item

	ICI Cycle 1				ICI Cycle 2				ICI Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Milk Dispenser	97	60	1.6	40.4	237	75	3.2	79.0	334	135	2.5	61.9
Hobart Mixer	185	60	3.1	77.1	236	75	3.1	78.7	421	135	3.1	78.0
Coffee Urn	128	45	2.8	71.1	104	60	1.7	43.3	232	105	2.2	55.2
Meat Slicer	255	90	2.8	70.8	88	45	2.0	48.9	343	135	2.5	63.5
Deep Fat Fryer	18	30	0.6	15.0	88	45	2.0	48.9	106	105	1.0	25.2
Convection Oven	189	75	2.5	63.0	118	45	2.6	65.6	307	120	2.6	64.0
Ice Cream Maker	144	45	3.2	80.0	71	30	2.4	59.2	215	75	2.9	71.7
Gas Griddle	126	45	2.8	70.0	243	90	2.7	67.5	369	135	2.7	68.3
TOTALS	1142	450	2.5	63.1	1185	465	2.5	63.7	2327	915	2.5	63.6

	Self-Paced Cycle 1				Self-Paced Cycle 2				Self-Paced Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Milk Dispenser	74	45	1.6	41.1	86	45	1.9	47.8	160	90	1.8	44.4
Hobart Mixer	96	30	3.2	80.0	84	45	1.9	46.7	180	75	2.4	60.0
Coffee Urn	103	75	1.4	34.3	33	45	0.7	18.3	136	120	1.1	28.3
Meat Slicer	107	45	2.4	59.4	55	45	1.2	30.6	162	90	1.8	45.0
Deep Fat Fryer	30	30	1.0	33.3	16	30	0.5	13.3	46	60	0.8	19.2
Convection Oven	54	45	1.2	30.0	142	75	1.9	47.3	196	120	1.6	36.7
Ice Cream Maker	66	45	1.5	36.7	94	75	1.3	31.3	160	120	1.3	33.3
Gas Griddle	64	60	2.1	71.1	115	45	2.6	63.9	179	105	1.7	42.6
TOTALS	594	345	1.6	43.1	625	405	1.5	38.6	1219	750	1.6	40.6

COMPLETION TASK RATINGS

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Garrison Equipment
Ratings for Each Task Competency

	ICI Cycle 1				ICI Cycle 2				ICI Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Check Equipment	170	60	2.8	70.8	167	62	2.7	67.3	337	122	2.8	69.1
Safety Precautions	168	60	2.8	70.0	166	62	2.7	66.9	334	122	2.7	68.4
Start-Operate Equipment	225	89	2.5	62.5	235	93	2.5	63.2	460	182	2.5	63.2
Stop Equipment	157	60	2.6	65.4	161	67	2.6	64.9	318	127	2.5	62.6
Disassemble Equipment	150	60	2.5	62.5	156	62	2.5	62.9	306	122	2.5	62.7
Clean Equipment	125	60	2.1	52.1	145	62	2.3	58.5	270	122	2.2	55.3
Reassemble Equipment	147	59	2.5	61.3	155	62	2.5	62.5	302	121	2.5	62.4
TOTALS	1142	450	2.5	63.1	1185	465	2.5	63.7	2327	915	2.5	63.6

	Self-Paced Cycle 1				Self-Paced Cycle 2				Self-Paced Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Check Equipment	85	46	1.8	46.2	96	54	1.8	44.4	181	100	1.8	45.3
Safety Precautions	81	46	1.8	44.0	98	54	1.8	45.4	179	100	1.8	44.8
Start-Operate Equipment	112	46	2.4	54.1	110	81	1.4	34.0	222	127	1.7	43.7
Stop Equipment	88	46	1.9	47.8	75	54	1.4	34.7	163	100	1.6	40.8
Disassemble Equipment	76	46	1.7	41.3	85	54	1.6	39.4	161	100	1.6	40.3
Clean Equipment	74	45	1.6	40.2	78	54	1.4	36.1	152	100	1.5	38.0
Reassemble Equipment	78	46	1.7	42.4	83	54	1.5	38.4	161	100	1.6	40.3
TOTALS	594	345	1.6	43.1	625	450	1.5	38.6	1219	750	1.6	40.6

COMBINED RATINGS
Cycle 1 -- Cycle 2

Reaction Surveys

REACTION SURVEY
Perceptions of Competency

TASK COMPETENCY	ICI Cycle 1				ICI Cycle 2				ICI Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
1. Read and follow recipe cards	34	12	2.8	94.4	27	10	2.7	90.0	61	22	2.8	92.4
2. Prepare food for proper: taste	30	11	2.7	90.9	26	10	2.6	86.7	56	21	2.7	88.9
texture	29	11	2.6	87.9	24	10	2.4	80.0	53	21	2.5	84.1
appearance	29	11	2.6	87.9	24	10	2.4	80.0	53	21	2.5	84.1
garnish	28	11	2.5	84.8	23	10	2.3	76.7	51	21	2.4	81.0
3. Prepare and maintain work area	35	12	2.9	97.2	32	12	2.7	88.9	67	24	2.8	93.1
4. Use sanitation & safety proced	35	12	2.9	97.2	34	12	2.8	94.4	6	24	2.9	95.8
5. Use clean as you go procedures	33	12	2.8	91.7	34	12	2.8	94.4	67	24	2.9	93.1
6. Prepare food without waste	30	12	2.5	83.3	29	12	2.4	80.6	59	24	2.3	81.9
7. Use knife properly to: slice	35	12	2.9	97.2	29	11	2.6	87.9	64	23	2.8	92.8
shred	29	12	2.4	80.6	26	11	2.4	78.8	55	23	2.4	79.7
cube	28	12	2.3	77.8	28	11	2.5	84.8	56	23	2.4	81.2
dice	33	12	2.8	91.7	29	11	2.6	87.8	62	23	2.7	89.9
chop	36	12	3.0	100	30	11	2.7	90.9	66	23	2.9	95.7
mince	36	12	3.0	100	28	11	2.5	84.8	64	23	2.8	92.8
8. Weigh dry ingredients properly	32	12	2.7	88.9	32	12	2.7	88.9	64	24	2.7	88.9
measure liquid ingredients	32	12	2.7	88.9	30	11	2.7	90.9	62	23	2.7	90.0
9. Use proper procedure for soups	33	12	2.8	91.7	31	12	2.6	86.1	64	24	2.7	88.9
salads	31	11	2.8	93.9	34	12	2.8	94.4	65	23	2.8	94.2
basic sauces	28	11	2.5	84.8	26	10	2.6	86.7	54	21	2.6	85.7
10. Prepare bakery items: breads	28	12	2.3	77.8	31	11	2.8	93.9	59	23	2.6	85.5
cookies	27	12	2.3	75.0	34	12	2.8	94.4	61	24	2.5	84.7
cakes	32	12	2.7	88.9	33	12	2.8	91.7	65	24	2.7	90.3
rolls	31	12	2.6	86.1	32	11	2.9	97.0	63	23	2.7	91.3
pies	27	12	2.3	75.0	33	12	2.8	91.7	60	24	2.5	83.3
11. Prepare food items by: baking	33	12	2.8	91.7	31	12	2.6	86.1	64	24	2.7	88.9
roasting	31	12	2.6	86.1	29	11	2.6	87.9	60	23	2.6	87.0
frying	33	11	3.0	100	31	12	2.6	86.1	64	23	2.8	92.8
braising	28	11	2.5	84.8	23	11	2.1	69.7	51	22	2.3	77.3
stewing or boiling	29	11	2.6	87.9	26	11	2.4	78.8	55	22	2.5	83.3
12. Operate and maintain: mixer	34	12	2.8	94.4	32	12	2.7	88.9	66	24	2.8	91.7
slicer	33	12	2.8	91.7	28	12	2.3	77.8	61	24	2.5	84.7
coffee urn	34	12	2.8	94.4	29	12	2.4	80.6	63	24	2.6	87.5
milk dispenser	35	12	2.9	97.2	31	12	2.6	86.1	66	24	2.8	91.7
oven	32	12	2.7	88.9	30	12	2.5	83.3	62	24	2.6	86.1
deep fat fryer	29	11	2.6	87.9	30	12	2.5	83.3	59	23	2.6	85.5
13. Explain function of: mixer	31	11	2.8	93.9	29	12	2.4	80.6	60	23	2.6	87.0
slicer	30	11	2.7	90.9	26	12	2.2	72.2	56	23	2.4	81.2
coffee urn	33	11	3.0	100	27	12	2.3	75.0	60	23	2.6	87.0
milk dispenser	32	11	2.9	97.0	29	12	2.4	80.6	61	23	2.7	88.4
oven	27	11	2.5	81.8	26	12	2.2	72.2	53	23	2.3	76.8
deep fat fryer	28	11	2.5	84.8	28	12	2.3	77.8	23	56	2.4	81.2
14. Convert recipes	25	11	2.3	75.7	24	11	2.2	66.6	49	22	2.2	74.2
15. Ask questions to: prepare food	31	11	2.8	93.9	30	11	2.7	83.3	61	22	2.7	92.4
operate equipment	33	11	3.0	100	30	11	2.7	83.3	55	22	2.5	83.3
ICI GROUP TOTALS	1342	521	2.6	85.9	1308	513	2.6	85.0	2650	1034	2.6	85.4

Rating Scale

0 = can't do 1 = little 2 = somewhat 3 = very well

REACTION SURVEY

B-43

Perceptions of Competency

TASK COMPETENCY	S/P Cycle 1				S/P Cycle 2				Self-Paced Total			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
1. Read and follow recipe cards	15	7	2.1	71.4	31	13	2.4	79.5	46	20	2.3	76.7
2. Prepare food for proper: taste	17	8	2.1	70.8	32	12	2.7	88.9	49	20	2.5	81.7
texture	15	8	1.9	62.5	30	12	2.5	83.3	45	20	2.3	75.0
appearance	15	8	1.9	62.5	30	12	2.5	83.3	45	20	2.3	75.0
garnish	19	8	1.9	79.2	28	12	2.3	77.8	47	20	2.4	78.3
3. Prepare and maintain work area	19	8	2.4	79.2	35	13	2.7	89.7	54	21	2.6	85.7
4. Use sanitation & safety proced	22	8	2.8	91.7	35	13	2.7	89.7	57	21	2.7	90.5
5. Use clean as you go procedures	18	8	2.3	75.0	32	13	2.5	82.1	50	21	2.4	79.4
6. Prepare food without waste	21	8	2.6	87.5	33	13	2.5	84.6	54	21	2.6	85.7
7. Use knife properly to: slice	21	8	2.6	87.5	33	12	2.8	91.7	54	20	2.7	90.0
shred	17	8	2.1	70.8	28	12	2.3	77.8	45	20	2.3	75.0
cube	18	8	2.3	75.0	31	12	2.6	86.1	49	20	2.5	81.7
dice	16	7	2.3	76.2	32	12	2.7	88.9	48	19	2.5	84.2
chop	18	8	2.3	75.0	32	12	2.7	88.9	50	20	2.5	83.3
mince	20	8	2.5	83.3	24	12	2.0	66.6	44	20	2.2	73.3
8. Weigh dry ingredients properly	20	8	2.5	83.3	33	12	2.8	91.7	53	20	2.7	88.3
measure liquid ingredients	19	8	2.4	79.2	33	12	2.8	91.7	52	20	2.6	86.7
9. Use proper procedure for soups	19	8	2.4	79.2	34	12	2.8	94.4	53	20	2.7	88.3
salads	24	8	3.0	100	33	12	2.8	91.7	57	20	2.9	95.0
basic sauces	15	8	1.9	62.5	28	12	2.3	77.8	43	20	2.2	71.7
10. Prepare bakery items: breads	15	8	1.9	62.5	31	12	2.6	86.1	46	20	2.3	76.7
cookies	19	8	2.4	79.2	34	12	2.8	94.4	53	20	2.7	88.3
cakes	20	8	2.5	83.3	31	12	2.6	86.1	51	20	2.6	85.0
rolls	17	8	2.1	70.8	33	12	2.8	91.7	50	20	2.5	83.3
pies	16	8	2.0	66.6	31	12	2.6	86.1	47	20	2.4	78.3
11. Prepare food items by: baking	20	7	2.9	95.2	32	12	2.7	88.9	52	19	2.7	91.2
roasting	12	7	1.7	57.1	27	12	2.3	75.0	39	19	2.1	68.4
frying	18	7	2.6	85.7	31	12	2.6	86.1	49	19	2.6	86.0
braising	14	7	2.0	66.7	29	12	2.4	80.6	43	19	2.3	75.4
stewing or boiling	11	7	1.6	52.4	26	12	2.2	72.2	37	19	1.9	64.9
12. Operate and maintain: mixer	23	8	2.9	95.8	33	12	2.8	91.7	55	20	2.8	91.7
slicer	13	8	1.6	54.2	27	12	2.3	75.0	40	20	2.0	66.7
coffee urn	8	8	1.0	33.3	20	12	1.7	55.6	28	20	1.4	46.7
milk dispenser	15	8	1.9	62.5	33	12	2.8	91.7	48	20	2.4	80.0
oven	19	8	2.4	79.2	25	12	2.1	69.4	44	20	2.2	73.3
deep fat fryer	16	8	2.0	66.7	29	12	2.4	80.6	45	20	2.3	75.0
13. Explain function of: mixer	22	8	2.8	91.7	28	12	2.3	77.8	50	20	2.5	83.3
slicer	14	8	1.8	58.3	21	12	1.8	58.3	35	20	1.8	58.3
coffee urn	8	8	1.0	33.3	18	12	1.5	50.0	26	20	1.3	43.3
milk dispenser	17	8	2.1	70.8	26	12	2.2	72.2	43	20	2.2	71.7
oven	16	8	2.0	66.7	20	12	1.7	55.6	36	20	1.8	60.0
deep fat fryer	14	8	1.8	58.3	21	12	1.8	58.3	35	20	1.8	58.3
14. Convert recipes	6	7	0.9	25.0	27	12	2.3	75.0	33	19	1.7	57.9
15. Ask questions to: prepare food	21	7	3.0	100	35	12	2.9	97.2	56	19	2.9	98.2
operate equipment	21	7	3.0	100	36	12	3.0	100	57	19	3.0	100
SELF-PACED GROUP TOTALS	763	350	2.2	72.7	1331	545	2.4	81.4	2094	895	2.3	78.0

Rating Scale

0 = Can't do

1 = little

2 = somewhat

3 = very well

REACTION SURVEY
Factors of the Training Program

FACTOR	ICI Cycle 1				ICI Cycle 2				ICI Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
1. I was told what I was going to learn and why.	47	12	3.9	97.9	54	15	3.6	90.0	101	27	3.7	93.5
(*) 2. My instructor demonstrated each thing I was to learn.	46	12	3.8	95.8	55	15	3.7	91.7	100	27	3.7	97.6(*)
3. My instructor made sure I understood what to do.	46	12	3.8	95.8	54	15	3.6	90.0	100	27	3.7	92.6
4. I was told what I needed to correct and was doing right.	40	12	3.3	83.3	47	15	3.1	78.3	87	27	3.2	80.6
5. My instructor had me learn reasons for doing things.	44	12	3.7	91.7	50	15	3.3	83.3	94	27	3.5	87.0
(*) 6. I was asked to explain what I was learning.	44	12	3.7	91.7	48	15	3.2	80.0	92	27	3.4	85.2(*)
(*) 7. I was encouraged to share my ideas with other students.	43	12	3.6	89.6	46	15	3.1	76.7	89	27	3.3	82.4(*)
8. I was treated with respect by my instructors.	38	12	3.8	79.2	52	15	3.5	86.7	90	27	3.3	83.3
(@) 9. Time was wasted doing things that did not help me learn.	10	12	0.8	20.8	16	15	1.0	26.7	26	27	1.0	24.1(@)
10. My instructor took the time to help me understand.	44	12	3.7	91.7	53	15	3.5	88.3	97	27	3.6	89.8
11. I was able to read and understand the written material.	39	12	3.3	81.3	50	15	3.3	83.3	89	27	3.3	82.4
12. The instruction was too fast for me to follow.	9	12	0.8	18.8	18	15	1.2	30.0	27	27	1.0	25.0
13. The instruction was too slow and I got bored.	20	12	1.7	41.7	29	15	1.9	48.3	49	27	1.8	45.4
UNADJUSTED GROUP TOTAL	503	156	3.2	80.6	600	195	3.1	76.9	1103	351	3.1	78.6
ADJUSTED GROUP TOTAL	372	120	3.1	77.5	451	150	3.0	75.2	825	270	3.0	76.2

(*) Statements apply only to ICI training. Ratings not counted in adjusted group total.

(@) Ratings inverted for group totals because of the way statement is worded.

REACTION SURVEY

B-45

Factors of the Training Program

FACTOR	S/P Cycle 1				S/P Cycle 2				Self-Paced Total			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
1. I was told what I was going to learn and why.	22	8	2.8	68.8	38	12	3.2	79.2	60	20	3.0	75.0
(*) 2. My instructor demonstrated each thing I was to learn.	17	8	2.1	53.1	31	12	2.6	64.6	48	20	2.4	60.0
3. My instructor made sure I understood what to do.	26	8	3.3	81.3	38	12	3.2	79.2	64	20	3.2	80.0
4. I was told what I needed to correct and was doing right.	26	8	3.3	81.3	37	12	3.1	77.1	63	20	3.2	78.8
5. My instructor had me learn reasons for doing things.	24	8	3.0	75.0	32	12	2.7	66.7	56	20	2.8	70.0
(*) 6. I was asked to explain what I was learning.	28	8	3.5	87.5	39	12	3.3	81.3	67	20	3.4	83.8
(*) 7. I was encouraged to share my ideas with other students.	2	8	0.2	6.3	26	12	2.2	54.2	28	20	1.4	35.0
8. I was treated with respect by my instructors.	28	8	3.5	87.5	41	12	3.4	85.4	69	20	3.5	86.3
(@) 9. Time was wasted doing things that did not help me learn.	8	8	1.0	25.0	22	12	1.8	45.8	30	20	1.5	37.5
10. My instructor took the time to help me understand.	22	8	2.8	68.8	39	12	3.3	81.3	59	20	3.0	73.8
11. I was able to read and understand the written material.	26	8	3.3	81.3	39	12	3.3	81.3	65	20	3.3	81.3
12. The instruction was too fast for me to follow.	20	8	2.5	62.5	24	12	2.0	50.0	44	20	2.2	55.0
13. The instruction was too slow and I got bored.	6	8	0.8	18.8	7	12	0.6	14.6	13	20	0.7	16.3
UNADJUSTED GROUP TOTAL	271	104	2.6	65.1	418	156	2.7	67.0	689	260	2.7	66.3
ADJUSTED GROUP TOTAL	224	80	2.8	70.0	322	120	2.7	67.1	546	200	2.7	68.3

(*) Statements apply only to ICI training. Ratings not counted in adjusted group totals.

(@) Ratings inverted for group totals because of the way statement is worded.

COMBINED RATINGS
Cycle 1 -- Cycle 2

Ratings for
Small Quantity Cooking

COMPLETION TASK RATINGS

Small Quantity Cooking

	ICI Cycle 1				ICI Cycle 2				ICI Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Criterion 1	45	16	2.8	70.3	37	15	2.5	61.7	82	31	2.6	66.1
2	35	16	2.2	54.7	31	15	2.1	51.7	66	31	2.1	53.2
3	38	16	2.4	59.4	34	15	2.3	56.7	72	31	2.3	58.1
SOUP TOTAL	118	48	2.5	61.5	102	45	2.3	56.7	220	93	2.4	59.1
Criterion 1	35	15	2.3	58.3	31	13	2.4	59.6	66	28	2.4	58.9
2	34	15	2.3	56.7	29	13	2.3	55.8	63	28	2.3	56.3
3	29	15	1.9	48.3	26	13	2.0	50.0	55	28	2.0	59.1
SOUP TOTAL	98	45	2.2	54.4	86	39	2.2	55.1	184	84	2.2	54.8
Criterion 1	33	15	2.2	55.0	33	15	2.2	55.0	66	30	2.2	55.0
2	32	15	2.1	53.3	31	15	2.1	51.7	63	30	2.1	52.5
3	33	15	2.2	55.0	33	15	2.2	55.0	66	30	2.2	55.0
ENTRE TOTAL	98	45	2.1	54.4	97	45	2.2	53.9	195	90	2.2	54.2
Criterion 1	28	12	2.3	58.3	31	14	2.2	55.4	59	26	2.3	56.7
2	27	12	2.3	56.3	29	14	2.1	51.7	56	26	2.3	53.8
3	24	12	2.0	50.0	27	14	1.9	48.2	51	26	2.0	49.0
VEGETABLE TOTAL	79	36	2.2	54.9	87	42	2.1	51.8	166	78	2.1	53.2
GROUP TOTAL	393	174	2.3	56.5	372	171	2.2	54.4	765	345	2.2	55.4

	Self-Paced Cycle 1				Self-Paced Cycle 2				Self-Paced Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Criterion 1	38	14	2.7	67.9	25	11	2.3	56.8	63	25	2.5	63.0
2	32	14	2.3	57.1	24	11	2.2	54.5	56	25	2.2	56.0
3	31	14	2.2	55.4	22	11	2.0	50.0	53	25	2.1	53.0
SALAD TOTAL	101	42	2.4	60.1	71	33	2.2	53.8	172	75	2.3	57.3
Criterion 1	32	13	2.5	61.5	22	11	2.0	50.0	54	24	2.3	56.3
2	30	13	2.3	57.7	23	11	2.1	52.3	53	24	2.2	55.2
3	30	13	2.3	57.7	26	11	2.4	59.1	56	24	2.3	58.3
SOUP TOTAL	92	39	2.4	59.0	71	33	2.2	53.8	163	72	2.3	56.6
Criterion 1	34	14	2.4	60.7	30	14	2.1	53.6	64	28	2.3	57.1
2	36	14	2.6	64.3	32	14	2.3	57.1	68	28	2.4	60.7
3	35	14	2.5	62.5	31	14	2.2	55.4	66	28	2.4	58.9
ENTRE TOTAL	105	42	2.5	62.5	93	42	2.2	55.4	198	84	2.4	58.9
Criterion 1	32	14	2.3	57.1	32	14	2.3	57.1	64	28	2.3	57.1
2	22	14	2.4	58.9	30	14	2.1	53.6	63	28	2.3	56.3
3	30	14	2.1	53.6	30	14	2.1	53.6	60	28	2.1	53.6
VEGETABLE TOTAL	95	42	2.3	56.5	92	42	2.2	54.8	187	84	2.2	55.7
GROUP TOTAL	393	165	2.4	59.5	327	150	2.2	54.5	720	315	2.3	57.1

PROCEDURES RATINGS

B-49

Small Quantity Cooking

	ICI Cycle 1				ICI Cycle 2				ICI Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Criterion 1	38	12	3.2	79.2	43	15	2.9	71.7	81	27	3.0	75.0
2	49	17	2.9	72.1	37	15	2.5	61.7	86	32	2.7	61.2
3	45	16	3.1	76.6	35	15	2.3	58.3	84	31	2.7	67.7
4	55	17	3.2	80.9	36	15	2.4	60.0	91	32	2.8	71.1
5	51	17	3.0	75.0	46	15	2.4	60.0	87	32	2.7	68.0
6	41	16	2.6	64.1	30	15	2.0	50.0	71	31	2.3	57.3
7	41	17	2.4	60.3	32	15	2.1	53.3	73	32	2.3	57.0
8	41	17	2.4	60.3	37	15	2.5	61.7	78	32	2.4	60.9
9	36	17	2.1	52.9	28	15	1.9	46.7	64	32	2.0	50.0
10	39	16	2.4	60.9	35	15	2.3	58.3	74	31	2.4	59.6
11	43	17	2.5	63.2	35	15	2.3	58.3	78	32	2.4	60.9
TOTALS	483	180	2.7	67.1	384	165	2.3	58.2	867	345	2.5	62.8

	Self-Paced Cycle 1				Self-Paced Cycle 2				Self-Paced Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Criterion 1	38	11	3.5	86.4	41	14	2.9	73.2	77	25	3.1	77.0
2	37	15	2.5	61.7	31	14	2.2	55.4	68	29	2.3	58.6
3	40	15	2.7	66.7	29	14	2.1	51.8	69	29	2.4	59.5
4	40	15	2.7	66.7	32	14	2.3	57.1	72	29	2.5	62.1
5	43	15	2.9	71.7	33	14	2.4	58.9	76	29	2.6	65.5
6	33	14	2.4	58.9	26	14	1.9	46.4	59	28	2.1	52.7
7	33	15	2.2	55.0	27	14	1.9	48.2	60	29	2.1	51.7
8	39	14	2.8	69.6	37	14	2.6	66.1	76	28	2.7	67.9
9	32	14	2.3	57.1	27	14	1.9	48.2	59	28	2.1	52.7
10	28	15	1.9	46.7	28	14	2.0	50.0	56	29	1.9	48.3
11	34	14	2.4	60.7	33	14	2.2	58.9	67	28	2.4	59.8
TOTALS	397	157	2.5	63.2	344	154	2.2	55.8	741	311	2.4	59.6

CONFIDENCE/ATTITUDE INDICATOR RATINGS

Small Quantity Cooking

	ICI Cycle 1				ICI Cycle 2				ICI Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Criterion 1	49	17	2.9	72.1	40	15	2.7	66.7	89	32	2.8	69.5
2	49	17	2.9	72.1	40	15	2.7	66.7	89	32	2.8	69.5
3	47	16	2.9	73.4	40	15	2.7	66.7	87	31	2.8	74.2
4	44	14	3.1	78.6	39	15	2.6	65.0	83	29	2.9	71.6
5	46	16	2.9	71.9	33	15	2.2	55.0	79	31	2.6	63.7
TOTALS	235	80	2.9	73.4	192	75	2.6	64.0	427	155	2.6	68.9

	Self-Paced Cycle 1				Self-Paced Cycle 2				Self-Paced Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Criterion 1	41	15	2.7	68.3	32	14	2.3	57.1	73	29	2.5	62.9
2	37	15	2.5	61.7	37	14	2.6	66.1	74	29	2.6	63.8
3	41	15	2.7	68.3	39	14	2.8	69.6	80	29	2.8	69.0
4	36	14	2.6	64.3	37	14	2.6	66.1	73	28	2.6	65.2
5	33	13	2.5	63.5	27	13	2.1	51.9	60	26	2.3	58.7
TOTALS	188	72	2.6	63.5	172	69	2.5	62.3	360	141	2.6	63.8

COMBINED RATINGS
Cycle 1 -- Cycle 2

Ratings for
Small Quantity Baking

COMPLETION TASK RATINGS
Small Quantity Baking

	ICI Cycle 1				ICI Cycle 2				ICI Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Criterion 1	36	15	2.4	60.0	39	15	2.6	65.0	75	30	2.5	62.5
2	26	15	1.7	43.3	37	15	2.5	61.7	63	30	2.1	52.5
3	25	15	1.7	41.7	33	15	2.2	55.0	58	30	1.9	48.3
BISCUITS TOTAL	87	45	1.9	48.3	109	45	2.4	60.6	196	90	2.2	54.4
Criterion 1	28	13	2.2	53.8	35	15	2.3	58.3	63	28	2.3	56.3
2	28	13	2.2	53.8	31	15	2.1	51.7	59	28	2.1	52.7
3	28	13	2.2	53.8	33	15	2.2	55.0	61	28	2.2	54.5
MUFFINS TOTAL	84	39	2.2	53.8	99	45	2.2	55.0	183	84	2.2	54.4
Criterion 1	26	11	2.4	59.1	11	5	2.2	55.0	37	16	2.3	57.8
2	21	11	1.9	47.7	12	5	2.4	60.0	22	16	2.1	51.6
3	25	11	2.3	56.8	11	5	2.2	55.0	36	16	2.3	56.3
FRENCH TOAST TOTAL	72	33	2.2	54.5	34	15	2.3	56.7	106	48	2.2	55.2
Criterion 1	11	4	2.8	68.8	24	10	2.4	60.0	35	14	2.5	62.5
2	12	4	3.0	75.0	23	10	2.3	57.5	35	14	2.5	62.5
3	12	4	3.0	75.0	26	10	2.6	65.0	38	14	2.7	67.9
OMELET TOTAL	35	12	2.9	72.9	73	30	2.4	60.8	108	42	2.6	64.3
Criterion 1	45	15	3.0	75.0	48	15	3.2	80.0	93	30	3.1	77.5
2	45	15	3.0	75.0	46	15	3.1	76.7	91	30	3.0	75.8
3	42	15	2.8	70.0	52	15	3.5	86.7	94	30	3.1	78.3
CAKE TOTAL	132	45	2.9	73.3	146	45	3.2	81.1	278	90	3.1	77.2
Criterion 1	47	14	3.4	83.9	47	15	3.1	78.3	94	29	3.2	81.0
2	42	14	3.0	75.0	39	15	2.6	65.0	81	29	2.8	69.8
3	41	14	2.9	73.2	39	15	2.6	65.0	80	29	2.8	69.0
FROSTING TOTAL	130	42	3.1	77.4	125	45	2.8	65.4	255	87	2.9	73.3
GROUP TOTAL	540	216	2.5	62.5	586	225	2.6	65.1	1126	441	2.6	63.8

	Self-Paced Cycle 1				Self-Paced Cycle 2				Self-Paced Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Criterion 1	24	13	1.8	46.2	25	14	1.8	44.6	49	27	1.8	45.4
2	19	13	1.5	36.5	21	14	1.5	37.5	40	27	1.5	37.0
3	22	13	2.5	42.3	33	14	1.6	39.3	44	27	1.6	40.7
BISCUITS TOTAL	65	39	1.7	41.7	68	42	1.6	40.5	133	81	1.6	41.0
Criterion 1	27	13	2.1	51.9	32	14	2.3	57.1	59	27	2.2	54.6
2	29	13	2.2	55.8	29	14	2.1	51.8	58	27	2.1	53.7
3	31	13	2.4	59.6	29	14	2.1	51.8	60	27	2.2	55.6
MUFFINS TOTAL	87	39	2.2	55.8	90	42	2.1	53.6	177	81	2.2	54.6
Criterion 1	10	4	2.5	62.5	28	11	2.5	63.6	38	15	2.5	63.3
2	7	4	1.8	43.8	25	11	2.3	56.8	32	15	2.1	53.3
3	10	4	2.5	62.5	27	11	2.4	61.8	37	15	2.5	61.7
FRENCH TOAST TOTAL	27	12	2.3	56.3	80	33	2.4	60.8	107	45	2.4	59.4
Criterion 1	26	10	2.6	65.0	9	4	2.3	56.3	35	14	2.5	62.5
2	22	10	2.2	55.0	10	4	2.5	62.5	32	14	2.3	57.1
3	21	10	2.1	52.5	9	4	2.3	56.3	30	14	2.1	53.6
OMELET TOTAL	69	30	2.3	57.5	28	12	2.3	58.3	97	42	2.3	57.7
Criterion 1	43	14	3.1	76.8	36	13	2.8	69.2	79	27	2.9	73.1
2	40	14	2.9	71.4	34	13	2.6	65.4	74	27	2.7	68.5
3	43	14	3.1	76.8	39	13	3.0	75.0	82	27	3.0	75.9
CAKE TOTAL	126	42	3.0	75.0	109	39	2.8	69.9	235	81	2.9	72.5
Criterion 1	39	14	2.8	69.6	34	13	2.6	65.4	73	27	3.7	67.6
2	33	14	2.4	58.9	32	13	2.5	61.5	65	27	2.4	60.2
3	35	14	2.5	62.5	31	13	2.4	59.6	66	27	2.4	61.1
FROSTING TOTAL	107	42	2.5	63.7	97	39	2.5	62.2	204	81	2.5	63.0
GROUP TOTAL	481	204	2.4	58.9	472	207	2.3	57.0	953	411	2.3	58.0

PROCEDURES RATINGS
Small Quantity Baking

B-53

	ICI Cycle 1				ICI Cycle 2				ICI COMBINED			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Criterion 1	53	14	3.8	94.6	45	15	3.0	75.0	93	29	3.2	80.2
2	48	15	3.2	80.0	41	15	2.7	68.3	89	30	3.0	74.2
3	45	15	3.0	75.0	41	15	2.7	68.3	86	30	2.9	71.7
4	44	15	2.9	73.3	40	15	2.7	66.7	84	30	2.8	70.0
5	49	15	3.3	81.7	40	15	2.7	66.7	89	30	3.0	74.2
6	35	14	2.5	62.5	34	15	2.3	56.7	69	29	2.4	59.5
7	36	15	2.4	60.0	29	15	1.9	48.3	65	30	2.2	54.2
8	44	15	2.9	73.3	38	15	2.5	63.3	82	30	2.7	68.3
9	35	14	2.5	62.5	31	15	2.1	51.7	66	29	2.3	56.8
10	26	14	1.9	46.4	31	15	2.1	51.7	57	29	2.0	49.1
11	35	14	2.5	62.5	33	15	2.2	55.0	68	29	2.3	58.6
GROUP TOTAL	450	160	2.8	70.3	403	165	2.4	61.1	853	325	2.6	65.5

	Self-Paced Cycle 1				Self-Paced Cycle 2				Self-Paced Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Criterion 1	32	9	3.6	89.0	42	14	3.0	75.0	74	23	3.2	80.4
2	42	14	3.0	75.0	35	14	2.5	62.5	77	28	2.8	68.8
3	41	14	2.9	73.2	37	14	2.6	66.1	78	28	2.8	69.6
4	35	13	2.7	67.3	40	14	2.9	71.4	75	27	2.8	69.4
5	38	13	2.9	73.1	38	14	2.7	67.9	76	27	2.8	70.4
6	30	14	2.1	53.6	28	14	2.0	50.0	58	28	2.1	51.8
7	29	14	2.1	51.8	24	14	1.7	42.9	53	28	1.9	47.3
8	33	13	2.5	63.5	35	14	2.5	62.5	68	27	2.5	62.9
9	28	13	2.2	53.9	31	14	2.2	60.7	59	27	2.2	54.6
10	28	14	2.0	50.0	27	14	1.9	48.2	55	28	2.0	49.1
11	29	13	2.2	55.8	30	14	2.1	53.6	59	27	2.2	54.6
GROUP TOTAL	365	145	2.5	62.9	367	154	2.4	59.6	732	299	2.4	62.9

CONFIDENCE/ATTITUDE INDICATOR RATINGS

Small Quantity Baking

	ICI Cycle 1				ICI Cycle 2				ICI Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Criterion 1	46	15	3.1	76.7	42	15	2.8	70.0	88	30	2.9	73.3
2	43	15	2.9	71.7	43	15	2.9	71.7	86	30	2.9	71.7
3	45	15	3.0	75.0	45	15	3.0	75.0	90	30	3.0	75.0
4	43	15	2.9	71.7	42	15	2.8	70.0	85	30	2.8	70.8
5	39	15	2.6	65.0	42	15	2.8	70.0	81	30	2.7	67.5
GROUP TOTALS	216	75	2.9	72.0	214	75	2.9	71.3	430	150	2.9	71.7

	Self-Paced Cycle 1				Self-Paced Cycle 2				Self-Paced Combined			
	TOT	N	AVG	%	TOT	N	AVG	%	TOT	N	AVG	%
Criterion 1	36	14	2.6	64.3	40	14	2.9	71.4	76	28	2.7	67.9
2	35	14	2.5	62.5	40	14	2.9	71.4	75	28	2.7	67.0
3	35	14	2.5	62.5	39	14	2.8	69.6	74	28	2.6	66.1
4	42	14	3.0	75.0	36	14	2.6	64.3	78	28	2.8	69.6
5	35	14	2.5	62.5	35	14	2.5	62.5	70	28	2.5	67.5
GROUP TOTALS	183	70	2.6	65.4	190	70	2.7	67.9	373	140	2.7	66.6

Evaluation
Learning Strategies Training Program
94B10
Fort Lee Virginia

DATA FROM CYCLE 1
Groups Starting Training 15 July 1981

ICI GROUP
15 July
STUDENT CHARACTERISTICS
-- Personal in Nature --

Student	No.	Lab	Comp.	Age	Sex	Race	Educ. Level	OF	GT	CO	FA	EL	GM	MM	CL	ST	SC	AIT FAIL
SILBAUGH	1	B	RA	21	M	C	10	100	98	103	94	96	99	104	92	98	99	0
SMITH	2	A	RA	18	M	C	9	102	95	102	98	98	98	110	93	91	97	0
SUTTON	3	B	RA	17	M	C	9	87	93	91	96	92	86	86	88	93	84	0
PARKER	7	B	AR	23	F	N	12	85	89(*)	90	94	81	80	80	101	83	95	0
MINOR	8	A	NG	24	M	C	12	93	96	115	90	94	92	84	109	92	92	0
HICKS	9	B	AR	25	M	C	8	90	97	96	85	104	96	96	91	86	94	0
PACE	10	B	RA	18	M	C	10	93	96	90	99	104	97	94	88	96	87	0
BURSEY	11	A	RA	21	M	C	9	90	99	97	95	97	92	92	91	95	82	0
NOBLE	12	A	NG	20	M	N	12	98	92	95	100	80	80	93	115	90	78	0
TALBERT	14	B	RA	18	M	N	10	85	89(*)	80	84	87	82	87	88	83	82	0
JACKSON	16	B	RA	20	M	N	12	86	86(*)	75	79	74	71	83	87	79	80	0
EMERY	17	A	AR	22	M	C	11	100	87	111	99	98	104	107	75	99	87	1
WILLIAMS	18	A	NG	28	M	N	0	-	-	-	-	-	-	-	-	-	-	0
TRAVER	22	A	NG	18	M	N	10	85	89(*)	80	84	87	82	87	88	89	82	0
CAREY	23	A	RA	27	M	C	12	-	-	-	-	-	-	-	-	-	-	0
VILLAREAL	33	A	AR	18	M	C	10	91	88	88	90	94	91	87	81	91	106	0
SALINAS	34	B	RA	18	M	C	12	90	77	81	75	79	93	87	89	78	80	0
LITTLEPAGE	35	A	RA	21	F	N	12	85	112	80	91	98	85	76	100	96	89	0
GROUP AVERAGES			RA=10	21.1	M=16	C=11	10.6	91.3	92.7	92.1	90.8	90.8	89.3	90.8	92.3	89.9	88.4	1
			AR= 4		F= 2	N= 7				(*)=4								
			NG= 4															

(*) Indicates course prerequisite of a standard score of 90 or higher in OF or GT was not met.
(-) Indicates data not available.

-- PERSONAL IN NATURE --

SELF-PACED GROUP

15 JULY

STUDENT CHARACTERISTICS

-- Personal in Nature --

STUDENT	No.	Lab	Comp.	Age	Sex	Race	Educ. Level	OF	GT	CO	FA	EL	GM	MM	CL	ST	SC	AIT FAIL
YODER	4	B	RA	21	M	C	11	118	115	114	109	111	109	116	118	107	121	0
WHYTE	5	A	RA	20	M	N	12	96	97	82	85	95	98	87	86	103	89	0
PAGE	6	A	RA	19	M	C	11	98	92	89	93	93	93	96	109	94	103	0
HILL	13	B	RA	24	M	N	12	-	-	-	-	-	-	-	-	-	-	0
HERRING	15	A	RA	23	M	Z	12	-	-	-	-	-	-	-	-	-	-	0
JOSEPH	19	B	RA	20	M	C	12	88	83(*)	102	99	85	89	89	82	89	87	0
ANDERSON	20	A	RA	20	F	N	12	95	104	97	104	100	93	95	104	96	99	2
KEEN	21	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
BARBER	24	A	NG	19	M	C	9	100	94	110	99	84	93	87	125	98	91	0
SHEPARD	25	B	RA	21	M	N	12	76	76(*)	75	76	86	88	83	72	82	73	1
BROWN	26	A	RA	21	M	Z	0	122	120	114	121	118	114	118	117	121	114	0
MOORE	27	A	RA	27	M	N	12	84	82(*)	62	91	72	70	77	84	98	66	1
PODOLL	28	B	RA	18	M	C	11	115	99	116	112	109	118	118	107	109	117	0
WOMACK	29	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OSTRANDER	30	A	RA	17	M	C	9	103	94	103	99	103	107	108	92	104	96	1
GULES	31	A	RA	22	M	C	12	92	90	83	75	90	98	94	67	87	78	0
LONG	32	B	RA	19	M	C	12	95	87	66	92	91	89	79	79	84	87	0
DAVIDSON	36	B	AR	19	M	C	9	94	88	97	85	98	88	88	86	88	88	0
GROUP AVERAGE			RA=14 AR=1 NG=1	20.6	M=15 F=1	C=9 N=5 Z=2	10.5	98.3	94.4	93.6	95.7	95.4	96.2	95.4	94.9	97.1	93.5	4

(*) Indicates course prerequisite of a standard score of 90 or higher in OF or GT was not met.

(-) Indicates data not available.

-- PERSONAL IN NATURE --

ICI GROUP

15 JULY

COMPOSITE RATINGS
Percent of Total Scores

Student Number	COOKING			BAKING			COMBINED			SKILLS	TOTAL
	Items	Procedures	Confidence	Items	Procedures	Confidence	Items	Procedures	Confidence	Cooking Skills	Total
POSSIBLE =	48	44	20	60	44	20	108	88	40	20	256
1	N	28	23	16			28	23	16		64
	%	41.7	52.3	65.0			25.9	26.1	40.0		48.4(*)
2	N	6	15	6			6	15	6		27
	%	12.5	34.1	30.0			5.6	17.0	15.0		26.5(*)
3	N	23	40	20	32	25	10	55	65	30	163
	%	47.9	90.9	100.0	53.3	56.8	50.0	50.9	77.3	75.0	63.7
7	N	21	24	9	40	27	15	61	51	24	142
	%	43.8	54.5	45.0	66.7	61.4	75.0	56.5	58.0	60.0	55.5
8	N										
	%										
9	N	15	16	5	36	34	16	51	40	21	132
	%	31.3	36.4	25.0	60.0	77.3	80.0	47.2	45.5	52.5	51.6
10	N	26	37	19	38	30	14	64	67	33	178
	%	54.2	84.1	95.0	63.3	68.2	70.0	59.3	76.1	82.5	69.5
11	N	23	27	15	30	23	9	53	50	24	140
	%	47.9	61.4	75.0	50.0	52.3	45.0	49.1	56.8	60.0	54.7
12	N	27	27	9	39	29	11	66	56	20	150
	%	56.3	61.4	45.0	65.0	65.9	55.0	61.1	63.6	50.0	58.6
14	N	23	29	8	45	37	17	68	66	25	168
	%	47.9	65.9	40.0	75.0	84.1	85.0	63.0	75.0	62.5	65.6
16	N	29	27	11	30	36	16	59	63	27	164
	%	60.4	61.4	55.0	50.0	81.8	80.0	54.6	71.6	67.5	64.1
17	N	23	25	16	32	25	13	55	50	29	148
	%	47.9	56.8	80.0	53.3	56.8	65.0	50.9	56.8	72.5	57.8
18	N	17	22	10	29	27	16	46	49	26	130
	%	35.4	50.0	50.0	48.3	61.4	80.0	42.6	55.7	65.0	50.8
22	N	24	33	20	42	36	17	66	69	37	190
	%	50.0	75.0	100.0	70.0	81.8	85.0	61.1	78.4	92.5	74.2
23	N	31	38	20	36	36	17	67	74	37	191
	%	64.6	86.4	100.0	60.0	81.8	85.0	62.0	84.1	92.5	74.6
33	N	18	34	18	37	27	15	55	61	22	149
	%	37.5	77.3	90.0	61.7	61.4	75.0	50.9	69.3	82.5	58.2(*)
34	N	31	33	19	41	29	17	72	62	36	181
	%	64.6	75.0	95.0	68.3	65.9	85.0	66.7	70.5	90.0	20.7
35	N	28	33	17	33	29	13	61	62	30	165
	%	58.3	75.0	85.0	55.0	65.9	65.0	56.5	70.5	75.0	64.5
TOTAL %		48.2	64.6	69.1	60.0	68.2	72.0	57.6	70.7	75.2	57.031

(*) Adjusted. Absent from duty 30-31 or 31 July

SELF-PACED GROUP

8-59

15 JULY

COMPOSITE RATINGS
Percent of Total Scores

		COOKING			BAKING			COMBINED			SKILLS	TOTAL
Student Number		Items	Procedures	Confidence	Items	Procedures	Confidence	Items	Procedures	Confidence	Cooking Skills	Total
POSSIBLE =		48	44	20	60	44	20	108	88	40	20	256
4	N											
	%											
5	N	21	29	15	34	23	12	55	52	27	13	147
	%	43.7	65.9	75.0	56.7	52.3	60.0	50.9	59.1	67.5	65.0	57.4
6	N											
	%											
13	N	28	36	18	44	26	11	72	62	29	16	179
	%	58.3	81.8	90.0	73.3	59.1	55.0	66.7	70.5	72.5	80.0	69.9
15	N	31	26	13	38	25	14	69	51	27	17	164
	%	64.6	59.1	65.0	63.3	56.8	70.0	63.9	58.0	67.5	85.0	64.1
19	N	29	21	11	35	27	15	64	48	26	8	146
	%	60.4	47.7	55.0	58.3	61.4	75.0	59.3	54.5	65.0	40.0	57.0
20	N	32	29	14	38	30	15	68	59	29	10	166
	%	62.5	65.9	70.0	63.3	68.2	75.0	63.0	67.0	72.5	50.0	64.8
21	N	32	24	11	40	39	16	72	63	27	8	170
	%	66.7	54.5	55.0	66.7	88.6	80.0	66.7	71.6	67.5	40.0	66.4
24	N	25	27	8	16	17	6	41	44	14	6	105
	%	52.1	61.4	40.0	26.7	38.6	30.0	38.0	50.0	35.0	30.0	41.0
25	N	26	30	17	39	25	11	65	55	28	11	159
	%	54.2	68.2	85.0	65.0	56.8	55.0	60.2	62.5	70.0	55.0	62.1
26	N	36	28	10	41	26	15	77	54	25	15	171
	%	75.0	63.6	50.0	68.3	59.1	75.0	71.3	61.4	62.5	75.0	66.8
27	N	14	25	10	20	18	10	34	43	20	8	105
	%	29.2	56.8	50.0	33.3	40.1	50.0	31.5	48.9	50.0	40.0	41.0
28	N	28	29	18				28	29	18		75
	%	58.3	65.9	90.0				25.9	33.0	45.0		56.2(*)
29	N	20	21	12	37	31	19	57	52	31	12	152
	%	41.7	47.7	60.0	61.7	70.5	95.0	52.8	59.1	77.5	60.0	59.4
30	N	34	31	16	34	21	12	68	52	28	10	158
	%	70.8	70.5	80.0	56.7	47.7	60.0	63.0	59.1	70.0	50.0	59.4
31	N	22	22	6	34	26	14	56	48	20	8	132
	%	45.8	50.0	30.0	56.7	59.1	70.0	51.9	54.5	50.0	40.0	51.6
32	N	17	19	9	31	31	13	48	50	22	12	132
	%	35.4	43.2	45.0	51.7	70.5	65.0	44.4	56.8	55.0	60.0	51.6
36	N											
	%											
TOTAL %		54.5	60.2	62.7	57.3	59.3	65.4	54.0	57.7	61.8	51.3	56.276

(*) Adjusted. Absent from duty 30-31 July

ICI GROUP
15 JULYCOMPOSITE RATINGS
Summary by Tasks

			SMALL QUANTITY COOKING							SMALL QUANTITY BAKING							SKILLS		TOTALS	
Number	Lab		Salad	Soup	Entree	Vegetable	Procedure	Confidence	Biscuits	Muffins	French Toast	Omelet	Cake	Frosting	Procedure	Confidence	Cooking Skills	TOTAL	N	MEAN
SILBAUGH	1	B	8	4	10	6	23	13	X	X	X	X	X	X	X	X	X	64	28	2.3
SMITH	2	A	X	X	6	X	15	6	X	X	X	X	X	X	X	X	X	27	18	1.5
SUTTON	3	B	8	6	5	4	40	20	4	3	X	7	8	10	25	10	13	163	63	2.6
PARKER	7	B	4	5	8	4	24	9	7	6	4	X	11	12	27	15	6	142	63	2.3
MINOR	8	A																		
HICKS	9	B	6	X	3	6	16	5	9	10	5	X	12	X	34	16	10	132	56	2.4
PACE	10	B	8	7	6	5	37	19	4	10	X	9	9	6	30	14	14	178	63	2.8
BURKEY	11	A	8	7	8	X	27	15	3	X	7	X	9	11	23	9	13	140	58	2.4
MOBLE	12	B	8	5	6	8	27	9	6	11	9	X	7	6	29	11	8	150	61	2.5
TALBERT	14	B	7	4	6	6	29	8	7	7	8	X	12	11	37	17	9	168	62	2.7
JACKSON	16	B	7	4	9	9	27	11	7	X	3	X	10	10	36	16	15	164	61	2.7
EMERY	17	A	9	10	4	X	25	16	5	4	8	X	8	7	25	13	14	148	61	2.4
WILLIAMS	18	A	7	7	3	X	22	10	3	6	X	11	3	6	27	16	9	130	58	2.2
TRAVER	22	A	8	9	X	7	33	20	8	6	8	X	11	9	36	17	18	190	61	3.1
CAREY	23	A	8	6	8	9	38	20	6	6	6	X	9	9	36	17	13	191	64	3.0
VILLAREAL	33	A	11	7	X	X	34	18	9	4	8	X	7	9	27	15	X	149	52	2.9
SALINAS	34	B	6	8	8	9	33	19	5	8	X	8	8	12	29	17	11	181	63	2.9
LITTLEPAGE	35	A	5	9	8	6	33	17	4	3	6	X	8	12	29	13	12	165	63	2.6
TOTAL			118	98	98	79	483	235	87	84	72	35	132	130	450	216	165	2482		
CRITERION N			48	45	45	36	180	80	45	39	33	12	45	42	160	75	70		955	
MEAN			2.5	2.2	2.2	2.2	2.7	2.9	1.9	2.2	2.2	2.9	2.9	3.1	2.8	2.9	2.4			2.599

SELF-PACED GROUP
15 JULY

COMPOSITE RATINGS
Summary by Tasks

Number	Lab	SMALL QUANTITY COOKING							SMALL QUANTITY BAKING							SKILLS		TOTAL	N	MEAN
		Salad	Soup	Entree	Vegetable	Procedure	Confidence	Biscuits	Muffins	French Toast	Omelet	Cake	Frosting	Procedure	Confidence	Cooking Skills				
YODER	4 B					29	15	3	6	7	X	12	6	23	12	13	147	64	2.3	
WHYTE	5 A	4	6	4	7															
PAGE	6 A																			
HILL	13 B	7	7	6	8	36	18	7	8	X	11	9	9	26	11	16	179	64	2.8	
HERRING	15 A	8	8	9	6	26	13	4	10	X	6	9	9	25	14	17	164	63	2.6	
JOSEPH	19 B	8	8	9	4	21	11	4	3	X	6	11	11	27	15	8	146	61	2.4	
ANDERSON	20 A	10	8	7	7	29	14	4	7	8	X	12	7	30	15	10	166	64	2.6	
KEEN	21 B	5	10	7	10	24	11	8	6	X	7	12	7	39	16	8	170	63	2.7	
BARBER	24 A	11	X	8	6	27	8	X	7	X	3	0	6	17	6	6	105	56	1.9	
SHEPARD	25 B	5	5	10	6	30	17	7	10	X	9	7	6	25	11	11	159	62	2.6	
BROWN	26 A	9	10	8	9	28	10	5	10	X	7	9	10	26	15	15	171	61	2.8	
MOORE	27 A	8	X	X	6	25	10	3	X	X	6	4	7	18	10	8	105	54	1.9	
PODOLL	28 B	8	3	9	8	29	18	X	X	X	X	X	X	X	X	X	75	27	2.8	
WOMACK	29 B	4	6	5	5	21	12	3	3	7	X	12	12	31	19	12	152	62	2.5	
OSTRANDER	30 A	8	8	6	12	31	6	3	6	X	8	12	5	21	12	10	158	62	2.5	
GUILLES	31 A	6	7	9	X	22	16	6	8	X	6	9	5	26	14	8	132	61	2.2	
LONG	32 B	X	6	8	3	19	9	8	3	5	X	8	7	31	13	12	132	59	2.2	
DAVIDSON	36 B																			

TOTAL 101 92 105 95 397 188 65 87 27 69 126 107 365 183 154 2161

CRITERION N 42 39 42 42 157 72 39 39 12 30 42 42 145 70 70 883

MEAN 2.4 2.4 2.5 2.3 2.5 2.6 1.7 2.2 2.3 2.3 3.0 2.5 2.5 2.6 2.2 2.47

FREQUENCY OF RATING SCORES

Completion Tasks -- Food Items
Small Quantity Cooking and Baking

	FOOD ITEM	ICI GROUP					RATINGS					SELF-PACED GROUP				
		0	1	2	3	4						0	1	2	3	4
1	Potato Salad Waldorf Salad	0	2	12	2	0						0	4	7	3	0
2	Vegetable Soup Mulligatawny Soup	0	5	7	3	0						0	2	9	2	0
3	Baked Macaroni and Cheese Chicken Fried Steak	0	4	8	2	0						0	2	7	5	0
4	French Fried Onion Rings Cauliflower Au Gratin	0	3	6	3	0						0	4	7	2	1
5	Baking Powder Biscuits	0	7	6	2	0						0	7	6	0	0
6	Plain Muffins	0	4	6	3	0						0	4	6	3	0
7	French Toast	0	2	8	1	0						0	1	3	0	0
8	Plain Omelet	0	0	2	2	0						0	1	7	2	0
9	Chocolate Cake	0	1	6	6	2						1	1	2	5	5
10	Butter Cream Frosting	0	0	4	7	3						0	0	9	4	1
TOTAL		0	28	65	31	5						1	26	63	26	7
PERCENT OF TOTAL		0.0	21.7	50.4	24.0	3.9						6.8	21.1	51.2	21.1	5.7

KEY TO RATING SCORES

- 0 - Not present (not done).
- 1 - Present (done) but not minimally acceptable.
- 2 - Present (done) but only minimally acceptable (MALP).
- 3 - Present (done) above MALP.
- 4 - Present (done) at desired level for given conditions (DLP).

FREQUENCY OF RATING SCORES

B-63

Completion Tasks -- Food Items
Small Quantity Cooking and Baking

CRITERION	ICI GROUP					SELF-PACED GROUP				
	0	1	2	3	4	0	1	2	3	4
CRITERION 1--Taste/Flavor	0	14	42	60	14	1	13	47	50	12
CRITERION 2--Appearance	0	21	60	34	15	1	23	52	33	14
CRITERION 3--Texture/Consistency	0	27	47	47	9	1	22	47	39	14
TOTALS	0	62	149	141	38	3	58	146	122	40
PERCENT OF TOTAL	0.0	16.0	38.2	36.2	9.7	0.8	15.7	39.6	33.1	10.8

STUDENT ACHIEVEMENT

Completion Tasks -- Food Items

(Based on ratings average of all criteria for each item prepared.)

ICI GROUP
(Based on 130 items prepared)

SELF-PACED GROUP
(Based on 123 items prepared)

5 (3.9%) prepared at DLP	7 (5.7%) prepared at DLP
96 (74.4%) prepared at or above MALP	89 (72.4%) prepared at or above MALP
28 (21.7%) prepared below MALP (nogo)	27 (22.0%) prepared below MALP (nogo)

KEY TO RATING SCORES

- 0 - Not present (not done).
- 1 - Present (done) but not minimally acceptable.
- 2 - Present (done) but only minimally acceptable (MALP).
- 3 - Present (done) above MALP.
- 4 - Present (done) at desired level for given conditions (DLP).

AD-A115 085

ARMY QUARTERMASTER SCHOOL FORT LEE VA
EVALUATION OF LEARNING STRATEGIES TRAINING PROGRAM 94B10 FORT L--ETC(U)
NOV 81 C E CAVERT, J A SHTOGREN

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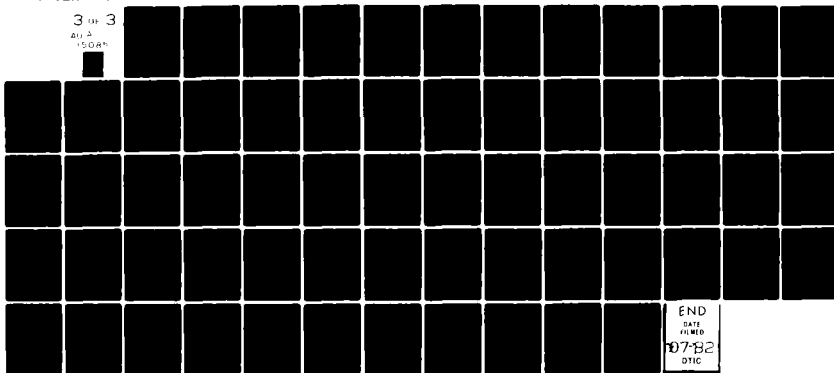
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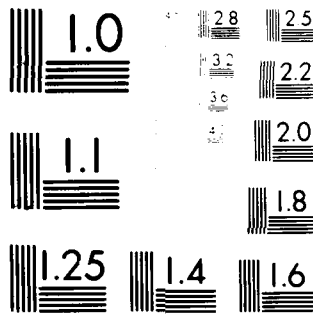
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MICROCOPY RESOLUTION TEST CHART
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FREQUENCY OF RATING SCORES

Procedures
Small Quantity Cooking and Baking

CRITERION	ICI GROUP					SELF-PACED GROUP				
	0	1	2	3	4	0	1	2	3	4
CRITERION 1--Washed hands.	1	1	0	6	18	0	2	1	2	15
CRITERION 2--Read complete recipe.	0	4	7	5	16	0	2	10	11	6
CRITERION 3--Checked equipment to be used.	2	1	3	13	12	0	0	11	13	5
CRITERION 4--Assembled all need utensils.	0	1	4	18	9	0	1	11	12	4
CRITERION 5--Assembled all needed ingredients.	0	1	8	9	14	0	2	8	9	9
CRITERION 6--Followed the recipe procedures.	1	3	11	9	6	1	7	10	5	5
CRITERION 7--Used proper sanitation and safety proced.	1	4	12	11	4	0	4	17	8	0
CRITERION 8--Prepared food item without waste.	0	6	7	11	8	0	2	10	10	5
CRITERION 9--Performed each cooking skill properly.	1	5	13	8	4	0	4	15	6	2
CRITERION 10--Used "clean as you go" procedures.	1	8	7	13	1	1	7	14	7	0
CRITERION 11--Cleaned self/utensils/work area after completion of task.	0	7	7	11	6	0	7	7	10	3
TOTALS	7	41	79	114	98	2	38	114	93	54
PERCENT OF TOTAL	2.1	12.1	23.3	33.6	28.9	0.6	12.6	37.8	30.8	17.9

STUDENT ACHIEVEMENT

Procedures

(Based on ratings average of all criteria for each student observation.)

ICI GROUP (Based on 32 student observations)	SELF-PACED GROUP (Based on 29 student observations)
0 (0.0%) performed at DLP	0 (0.0%) performed at DLP
30 (93.8%) performed at or above MALP	26 (89.7%) performed at or above MALP
2 (6.2%) performed below MALP (nogo)	3 (10.3%) performed below MALP (nogo)

FREQUENCY OF RATING SCORES
Confidence/Attitude Indicators
Small Quantity Cooking and Baking

B-65

CRITERION	ICI GROUP					SELF-PACED GROUP				
	0	1	2	3	4	0	1	2	3	4
CRITERION 1--Proceeded with the task without false starts or trial/error activity.	1	2	6	11	12	0	2	9	15	3
CRITERION 2--Attended to own actions and did not look to others for help or guidance.	0	4	6	13	9	0	4	8	16	1
CRITERION 3--Stayed focused on the task and did not create or participate in irrelevant conversation or activity.	1	2	4	14	10	0	4	8	12	5
CRITERION 4--When difficulties arose, remained "cool under fire" and took actions to overcome them.	2	1	2	14	10	0	1	8	15	4
CRITERION 5--Showed concern for quality by checking results of actions as he/she progressed through the preparation tasks.	1	1	12	8	9	0	4	10	8	5
TOTALS	5	10	30	60	50	0	15	43	66	18
PERCENT OF TOTAL	3.2	6.5	19.4	38.7	32.3	0.0	10.6	30.3	46.5	12.7

STUDENT ACHIEVEMENT
Confidence/Attitude Indicators
(Based on ratings average of all criteria for each student observation.)

ICI GROUP (Based on 32 student observations)	SELF-PACED GROUP (Based on 29 student observations)
3 (9.4%) performed at DLP	0 (0.0%) performed at DLP
26 (81.3%) performed at or above MALP	26 (89.7%) performed at or above MALP
3 (9.4%) performed below MALP (nogo)	3 (10.3%) performed below MALP (nogo)

KEY TO RATING SCORES

- 0 - Did NOT do.
- 1 - Did but NOT minimally acceptable.
- 2 - Did at minimum acceptable level of performance (MALP)
- 3 - Did above MALP but not to desired level performance.
- 4 - Did at DLP for given conditions.

FREQUENCY OF RATING SCORES

Cooking Skills

CRITERION	ICI GROUP					SELF-PACED GROUP				
	0	1	2	3	4	0	1	2	3	4
CRITERION 1--Finely shredded fresh cabbage.	0	3	7	3	1	1	1	5	6	1
CRITERION 2--Diced fresh sweet pepper (1/2 inch).	0	3	4	7	0	0	3	8	3	0
CRITERION 3--Sliced fresh pared cucumber (1/8 inch).	1	2	3	7	1	0	4	2	6	2
CRITERION 4-- Cutting tomato wedges (8).	0	1	3	7	3	0	3	8	1	2
CRITERION 5--Making a brown roux.	0	4	5	4	1	1	3	5	4	1
TOTAL	1	13	22	28	6	2	14	28	20	6
PERCENT OF TOTAL	1.4	18.6	31.4	40.0	8.6	2.9	20.0	40.0	28.6	8.6

STUDENT ACHIEVEMENT

Cooking Skills

(Based on ratings average of all criteria for each student observation.)

ICI GROUP (Based on 14 student observations)	SELF-PACED GROUP (Based on 14 student observations)
0 (0.0%) performed at DLP	0 (0.0%) performed at DLP
10 (71.4%) performed at or above MALP	9 (64.3%) performed at or above MALP
4 (28.6%) performed below MALP (nogo)	5 (35.7%) performed below MALP (nogo)

KEY TO RATING SCORES

- 0 - Not present (not done).
- 1 - Present (done) but not minimally acceptable
- 2 - Present (done) but only minimally acceptable (MALP).
- 3 - Present (done) above MALP.
- 4 - Present (done) at desired level for given conditions (DLP).

FREQUENCY OF RAW SCORES

B-67

Recipe Conversion

NUMBER CORRECT	ICI GROUP	SELF-PACED GROUP
0	2	2
1	1	2
2	0	1
3	1	0
4	1	2
5	2	2
6	2	1
7	2	1
8	2	1
9	1	1
10	0	0
11	2	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	1
17	0	0
18	0	0
19	0	0

STUDENT ACHIEVEMENT

Recipe Conversion

(Based on number of items correct.)

ICI GROUP (Based on 16 students tested)	SELF-PACED GROUP (Based on 14 students tested)
4 (25.0%) got 0- 3 answers correct	5 (35.7%) got 0 - 3 answers correct
7 (43.8%) got 4- 7 answers correct	6 (42.9%) got 4 - 7 answers correct
5 (31.3%) got 8-11 answers correct	2 (14.3%) got 8 -11 answers correct
0 (0.0%) got 12-15 answers correct	0 (0.0%) got 12--15 answers correct
0 (0.0%) got 15-19 answers correct	1 (7.1%) got 16--19 answers correct

FREQUENCY OF RATING SCORES

Garrison Equipment
(Based on average ratings for each equipment item.)

EQUIPMENT ITEM	ICI GROUP					RATINGS					SELF-PACED GROUP				
	0	1	2	3	4						0	1	2	3	4
Milk Dispenser	0	4	0	0	0						1	1	1	0	0
Hobart Mixer	0	0	1	3	0						0	0	1	1	0
Coffee Urn	0	0	2	2	0						1	3	1	0	0
Meat Slicer	0	0	3	2	0						0	1	1	1	0
Deep Fat Fryer	1	1	0	0	0						1	1	0	0	0
Convection Oven	0	1	2	2	0						1	2	0	0	0
Ice Cream Machine	0	0	0	3	0						1	1	0	0	0
Gas Griddle	0	0	2	1	0						0	1	2	0	0

TOTAL

PERCENT OF TOTAL

Garrison Equipment
(Based on individual ratings for each equipment item.)

EQUIPMENT ITEM	ICI GROUP					RATINGS					SELF-PACED GROUP				
	0	1	2	3	4						0	1	2	3	4
Milk Dispenser	3	21	37	0	0						12	5	16	11	1
Hobart Mixer	4	3	6	18	28						2	1	2	9	16
Coffee Urn	0	0	24	31	6						16	21	32	6	0
Meat Slicer	3	5	13	24	29						1	5	20	14	5
Deep Fat Fryer	16	6	6	0	0						6	18	6	0	0
Convection Oven	2	5	32	26	11						11	14	20	0	0
Ice Cream Machine	0	3	7	13	21						7	13	10	0	0
Gas Griddle	0	2	16	15	11						0	3	32	10	0

TOTAL

PERCENT OF TOTAL

STUDENT ACHIEVEMENT

(Based on ratings average of all criteria for each student observation.)

ICI GROUP

(Based on 30 student observations)

0 (0.0%) performed at DLP
23 (76.7%) performed at or above MALP
7 (23.3%) performed below MALP (nogo).

SELF-PACED GROUP

(Based on 23 student observations)

0 (0.0%) performed at DLP.
8 (34.8%) performed at or above MALP
15 (65.2%) performed below MALP (nogo).

FREQUENCY OF RATING SCORES

B-69

Garrison Equipment

CRITERION	ICI GROUP					RATINGS	SELF-PACED GROUP				
	0	1	2	3	4		0	1	2	3	4
CRITERION 1--Checked equipment before starting to operate it.	1	3	7	11	8		1	8	10	3	1
CRITERION 2--Explained purpose for checking.	1	1	10	10	8		2	4	11	6	0
CRITERION 3--Observed all safety precautions before operating.	1	3	7	10	9		5	4	10	3	1
CRITERION 4--Explained importance of safety precautions	1	0	8	13	8		3	2	13	4	1
CRITERION 5--Took the proper actions to start the equipment.	3	4	6	9	8		4	8	5	2	4
CRITERION 6--Took the proper actions to operate the equipment.	3	3	7	9	8		5	7	5	3	3
CRITERION 7--Explained starting and operating procedures.	3	2	11	5	8		5	8	5	4	1
CRITERION 8--Took the proper actions to stop the operation.	1	4	9	7	9		3	5	8	5	2
CRITERION 9--Explained procedure for stopping the operation.	1	2	11	10	6		3	4	11	2	3
CRITERION 10--Took proper actions to disassemble for cleaning.	4	2	9	9	6		5	5	8	4	1
CRITERION 11--Explained dis-assembling procedure.	1	1	13	8	7		4	5	9	4	1
CRITERION 12--Took proper actions to clean equipment.	4	8	7	4	7		3	7	10	2	1
CRITERION 13--Explained cleaning procedure.	2	8	7	10	3		3	6	9	3	1
CRITERION 14--Took proper actions to assemble equipment.	1	2	14	7	6		4	3	13	1	2
CRITERION 15--Explained assembling procedure.	1	2	15	5	5		4	4	4	4	0
TOTALS	28	45	141	127	106		54	80	138	50	22
PERCENT OF TOTAL	6.3	10.1	31.8	28.6	23.9		15.7	23.3	40.1	14.5	6.4

KEY TO RATING SCORES

- 0 - Did not do.
- 1 - Did but not minimally acceptable.
- 2 - Did at minimum acceptable level of performance (MALP).
- 3 - Did above MALP but not to desired level (DLP).
- 4 - Did at DLP for given conditions.

ICI GROUP
15 JULYCOMPLETION TASK RATINGS
Small Quantity Cooking

STUDENT NUMBER -	1	2	3	7	8	9	10	11	12	14	16	17	18	22	23	33	34	35	TOTAL	N	MEAN
LAB ASSIGNMENT -	B	A	B	A	B	A	B	A	B	A	B	A	A	A	A	A	B	A			
Criterion 1	3	3	2	2	3	3	2	3	3	3	3	3	3	3	3	4	2	3	45	16	2.8
2	2	2	1	2	3	2	2	2	2	3	2	3	2	3	2	4	2	1	35	16	2.2
3	3	3	1	2	2	3	3	3	2	3	2	3	2	2	3	3	2	1	38	18	2.4
SALAD TOTAL	8	8	4	6	8	8	8	7	7	9	7	9	7	8	8	11	6	5	118	48	2.5
Criterion 1	1	2	2	2	2	2	2	2	3	3	3	3	3	3	3	2	3	3	35	15	2.3
2	2	2	2	3	3	1	1	1	4	2	3	2	2	3	2	2	3	3	34	15	2.3
3	1	2	1	2	2	2	1	1	3	2	3	1	3	2	3	1	3	2	29	15	1.9
SOUP TOTAL	4	6	5	7	7	5	4	4	10	7	9	6	7	8	9	9	8	9	98	45	2.2
Criterion 1	3	2	2	3	1	2	3	2	1	3	1	1	3	3	3	3	3	3	33	15	2.2
2	4	2	2	1	2	2	2	2	3	2	1	3	2	1	3	2	2	2	32	15	2.1
3	3	2	1	3	1	2	3	2	3	3	1	1	2	2	2	3	3	3	33	15	2.2
ENTREE TOTAL	10	6	5	8	3	6	8	6	9	4	3	8	8	8	8	8	8	8	98	45	2.1
Criterion 1	2	2	2	2	2	3	2	3	2	3	3	3	3	3	3	2	2	2	28	12	2.3
2	2	1	1	2	2	3	2	3	3	2	3	2	3	2	3	4	2	2	27	12	2.3
3	2	1	1	2	1	2	2	3	2	3	2	3	2	3	2	3	2	2	24	12	2.0
VEGETABLE TOTAL	6	4	4	6	5	8	6	9	7	9	7	9	7	9	9	9	6	7	79	36	2.2
TOTAL	28	6	23	21	15	26	23	27	23	29	23	17	24	31	18	31	28	393			
CRITERION N	12	3	12	12	9	12	9	12	12	12	12	9	9	9	12	6	12	12	174		
MEAN	2.3	2.0	1.9	1.8	1.7	2.2	2.6	2.3	1.9	2.4	2.6	1.9	2.7	2.6	3.0	2.6	2.3	2.258			

SELF-PACED GROUP
15 JULY
COMPLETION TASK RATINGS
Small Quantity Cooking

STUDENT NUMBER -	4	5	6	13	15	19	20	21	24	25	26	27	28	29	30	31	32	36	TOTAL	N	MEAN
LAB ASSIGNMENT -	B	A	A	B	A	B	A	B	A	B	A	A	B	B	A	A	B	B			
Criterion 1	2			3	2	3	3	2	3	2	3	3	3	2	4	3			38	14	2.7
2	1			2	3	3	3	2	4	1	3	2	3	1	2	2			32	14	2.3
3	1			2	3	2	4	1	4	2	3	3	2	1	2	1			31	14	2.2
SALAD TOTAL	4			7	8	8	10	5	11	5	9	8	8	4	8	6			101	42	2.4
Criterion 1	2			3	2	3	3	4		3	2		1	2	3	2	2		32	13	2.5
2	2			2	3	3	2	3		2	3		1	2	2	3	2		30	13	2.3
3	2			2	3	2	3	3		1	4		1	2	3	2	2		30	13	2.3
SOUP TOTAL	6			7	8	8	8	10		5	10		3	6	8	7	6		92	39	2.4
Criterion 1	2			2	3	3	2	2	3	3	3		3	1	2	3	2		34	14	2.4
2	1			2	3	3	2	3	3	4	2		3	2	2	3	3		36	14	2.6
3	1			2	3	3	3	2	2	3	3		3	2	2	3	3		35	14	2.5
ENTREE TOTAL	4			6	9	9	7	7	8	10	8		9	5	6	9	8		105	42	2.5
Criterion 1	2			3	2	1	2	3	2	2	3	2	3	2	4		1		32	14	2.3
2	3			3	2	2	3	3	2	2	3	2	2	1	4		1		33	14	2.4
3	2			2	2	1	2	4	2	2	3	2	3	2	4		1		32	14	2.3
VEGETABLE TOTAL	7			8	6	4	7	10	6	6	9	6	8	5	12		3		97	42	2.3
TOTAL	21			28	31	29	32	32	25	26	36	14	28	20	34	22	17		395		
CRITERION N	12			12	12	12	12	12	9	12	12	6	12	12	12	9	9		165		
MEAN	1.6			2.3	2.6	2.4	2.7	2.7	2.8	2.2	3.0	2.3	2.8	1.7	2.8	2.4	1.9		2.394		

ICI GROUP
15 JULYPROCEDURES RATINGS
Small Quantity Cooking

STUDENT NUMBER -	1	2	3	7	8	9	10	11	12	14	16	17	18	22	23	33	34	35	TOTAL	N	MEAN
LAB ASSIGNMENT -	B	A	B	B	A	B	A	B	A	B	B	A	A	A	A	A	A	B	A		
Criterion 1	1	4	4	X		X	X	4	0	X	3	4	4	3	3	4	X	4	38	12	3.2
2	2	2	4	1		1	4	4	4	1	1	3	2	4	4	4	4	4	49	17	2.9
3	3	0	4	3		3	3	4	3	3	4	3	X	1	4	3	4	4	49	16	3.1
4	2	3	3	3		3	4	4	3	4	3	3	3	3	3	4	3	4	55	17	3.2
5	2	3	4	3		1	4	3	2	3	2	3	2	4	4	4	4	3	51	17	3.0
6	2	0	4	2		X	4	1	2	1	3	3	2	4	4	3	4	2	41	16	2.6
7	3	0	4	2		2	4	1	2	4	3	2	2	3	3	2	2	2	41	17	2.4
8	1	1	4	3		2	3	2	3	3	1	1	2	4	4	2	3	2	41	17	2.4
9	2	0	2	2		2	3	2	2	3	1	1	2	3	3	2	4	2	36	17	2.1
10	3	1	3	2		X	4	1	3	3	3	1	1	3	3	3	2	3	39	16	2.4
11	2	1	4	3		2	4	1	3	4	3	1	2	1	3	3	3	3	43	17	2.5

TOTAL	23	15	40	24		16	37	27	27	29	27	25	22	33	38	34	33	33	483		
CRITERION N	11	11	11	10		9	10	11	11	10	11	11	10	11	11	11	10	11		180	
MEAN	2.1	1.4	3.8	2.4		1.8	3.7	2.5	2.5	2.9	2.5	2.3	2.2	3.0	3.5	3.1	3.3	3.0		2.683	

SELF-PACED GROUP

15 JULY

PROCEDURES RATINGS

Small Quantity Cooking

STUDENT NUMBER -	4	5	6	13	15	19	20	21	24	25	26	27	28	29	30	31	32	36	TOTAL	N	MEAN
LAB ASSIGNMENT -	B	A	A	B	A	B	A	B	A	B	A	A	B	B	A	A	B	B			
Criterion 1	4			4	4	1	4	X	4	X	4	4	X	1	4	4	X		38	11	3.5
2	4			3	3	3	3	3	3	2	2	2	2	1	2	2	2		37	15	2.5
3	4			4	2	3	2	3	2	3	3	2	3	2	3	2	2		40	15	2.7
4	4			3	2	2	3	3	2	4	2	3	3	3	3	2	1		40	15	2.7
5	3			4	2	4	3	3	3	3	2	2	3	2	4	2	3		43	15	2.9
6	2			4	2	2	2	1	2	4	3	2	4	1	X	2	1		33	14	2.4
7	1			3	2	2	3	2	2	3	3	2	2	2	3	1	2		33	15	2.2
8	2			3	2	X	3	2	3	3	4	3	3	3	4	2	2		39	14	2.8
9	2			2	3	X	3	2	2	2	2	2	4	1	3	2	2		32	14	2.3
10	2			2	2	3	1	2	1	2	3	1	2	2	3	1	1		28	15	1.9
11	1			4	2	1	2	3	2	4	X	2	3	3	2	2	3		34	14	2.4
TOTAL	29			36	26	21	29	24	27	30	28	25	29	21	31	22	19		397		
CRITERION N	11			11	11	9	11	10	11	10	10	11	10	11	10	11	10		157		
MEAN	2.6			3.3	2.6	2.3	2.6	2.4	2.5	3.0	2.8	2.3	2.9	1.9	3.1	2.0	1.9		2.529		

ICI GROUP
15 JULYCONFIDENCE/ATTITUDE INDICATOR RATINGS
Small Quantity Cooking

STUDENT NUMBER -	1	2	3	7	8	9	10	11	12	14	16	17	18	22	23	33	34	35	TOTAL	N	MEAN
LAB ASSIGNMENT -	B	A	B	B	A	B	B	A	B	B	B	A	A	A	A	A	A	B	A		
Criterion 1	3	0	4	3		1	4	3	3	3	2	4	2	4	4	3	4	2	49	17	2.9
2	2	1	4	3		2	3	3	2	3	1	3	2	4	4	4	4	4	49	17	2.9
3	3	0	4	X		2	4	3	2	1	2	3	3	4	4	4	4	4	47	16	2.9
4	3	3	4	X		0	4	4	X	X	3	3	3	4	4	3	3	3	44	14	3.1
5	2	2	4	3		0	4	2	2	1	3	3	X	4	4	4	4	4	46	16	2.9
<hr/>																					
TOTAL	13	6	20	9		5	19	15	9	8	11	16	10	20	20	18	19	17	235		
CRITERION N	5	5	5	3		5	5	5	4	4	5	5	4	5	5	5	5	5		80	
MEAN	2.6	1.2	4.0	3.0		1.0	3.8	3.0	2.3	2.0	2.2	3.2	2.5	4.0	4.0	3.6	3.8	3.4			2.938

SELF-PACED GROUP
15 JULY

CONFIDENCE/ATTITUDE INDICATOR RATINGS
Small Quantity Cooking

STUDENT NUMBER -	4	5	6	13	15	19	20	21	24	25	26	27	28	29	30	31	32	36	TOTAL	N	MEAN
LAB ASSIGNMENT -	B	A	A	B	A	B	A	B	A	B	A	A	B	B	A	A	B	B			
Criterion 1	3		4	3	3	3	3	3	2	3	2	2	4	2	3	1	3		41	15	2.7
2	3		3	3	2	2	3	1	3	3	2	3	3	3	3	1	2		37	15	2.5
3	3		4	3	3	3	2	1	4	3	2	4	3	3	3	1	2		41	15	2.7
4	4		3	2	3	3	2	2	3	2	2	2	3	2	3	2	X		36	14	2.6
5	2		4	2	X	3	1	2	4	X	2	4	2	4	2	4	1	2	33	13	2.5
TOTAL	15		18	13	11	14	11	8	17	10	10	18	12	12	16	6	9.		188		
CRITERION N	5		5	5	4	5	5	5	5	4	5	5	5	5	5	5	4			72	
MEAN	3.0		3.6	2.6	2.8	2.8	2.2	1.6	3.4	2.5	2.0	3.6	2.4	3.2	1.2	2.3					2.611

ICI GROUP
15 JULYCOMPLETION TASK RATINGS
Small Quantity Baking

STUDENT NUMBER =		1	2	3	7	8	9	10	11	12	14	16	17	18	22	23	33	34	35	TOTAL	N	MEAN
LAB ASSIGNMENT =		B	A	B	A	B	A	B	A	B	A	B	A	A	A	A	A	A	B	A		
Criterion 1		2	3		2	3	3	2	1	3	3	3	2	1	3	2	3	3	2	36	15	2.4
2		1	2		3	1	1	2	2	2	2	1	1	3	2	3	1	1	26	15	1.7	
3		1	2		3	1	1	1	1	2	2	2	1	2	2	3	1	2	25	15	1.7	
BISCUITS TOTAL		4	7		9	4	3	6	7	7	7	5	3	8	6	9	5	4	87	45	1.9	
Criterion 1		1	2		4	3		3	3		3	3	1	2	2	2	1	3	1	28	13	2.2
2		1	2		3	3		4	2		2	2	2	2	2	2	2	2	28	13	2.2	
3		1	2		3	4		4	2		1	2	2	2	1	3	1	28	13	2.2		
MUFFINS TOTAL		3	6		10	10		11	7		4	6	6	6	4	8	3	84	39	2.2		
Criterion 1		2			1		3	3	3	1	3		3	2	3		2	26	11	2.4		
2		1			2		2	3	2	1	2		2	2	2	2	2	21	11	1.9		
3		1			2		2	3	3	1	3		3	2	3		2	25	11	2.3		
FRENCH TOAST TOTAL		4			5		7	9	8	3	8		8	6	8		6	72	33	2.2		
Criterion 1		3			3						3		3				2	11	14	2.8		
2		2			3		3				4		4				3	12	4	3.0		
3		2			3		3				4		4				3	12	4	3.0		
OMELET TOTAL		7			9		9				11					8	35	12	2.9			
Criterion 1		2	3		4	3	3	2	4	4	3	1	4	3	2	3	4	45	15	3.0		
2		3	4		4	3	3	2	4	3	3	1	4	3	3	2	45	15	3.0			
3		3	4		4	3	3	3	4	3	2	1	3	3	2	2	42	15	2.8			
CAKE TOTAL		8	11		12	9	9	7	12	10	8	3	11	9	7	8	8	132	45	2.9		
Criterion 1		4	4				2	4	2	4	4	3	3	3	3	4	4	47	14	3.4		
2		3	4				2	4	2	4	3	2	1	3	3	4	4	42	14	3.0		
3		3	4				2	3	2	3	3	2	2	3	3	4	4	41	14	2.9		
FROSTING TOTAL		10	12				6	11	6	11	10	7	6	9	9	12	12	130	42	3.1		
TOTAL		32	40		36	38	30	39	45	30	32	29	42	36	37	41	33	540				
CRITERION N		15	15		12	15	12	15	15	12	15	15	15	15	15	15	15	216				
MEAN		2.1	2.7		3.0	2.5	2.5	2.6	3.0	2.5	2.1	1.9	2.9	2.4	2.5	2.7	2.2				2.500	

SELF-PACED GROUP
15 JULY

COMPLETION TASK RATINGS
Small Quantity Baking

STUDENT NUMBER =		4	5	6	13	15	19	20	21	24	25	26	27	28	29	30	31	32	36	TOTAL	N	MEAN
LAB ASSIGNMENT =		B	A	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B			
Criterion 1		1	3	2	2	2	3	2	1	1	2	1	1	1	1	1	2	3	24	13	1.8	
2		1	2	1	1	1	2	2	2	1	2	2	1	1	1	1	2	2	19	13	1.5	
3		1	2	1	1	1	3	3	2	1	3	2	1	1	1	1	2	3	22	13	2.5	
BISCUITS TOTAL		3	7	4	4	4	8	7	5	3	7	5	3	3	3	3	6	8	65	39	1.7	
Criterion 1		2	3	3	1	2	2	2	2	3	3	3	3	1	2	2	2	1	27	13	2.1	
2		2	2	3	1	2	2	2	4	3	4	3	4	1	2	3	1	1	29	13	2.2	
3		2	3	4	1	3	2	2	2	4	3	3	1	1	2	3	1	1	31	13	2.4	
MUFFINS TOTAL		6	8	10	3	7	6	7	10	10	10	10	10	3	6	8	3	3	87	39	2.2	
Criterion 1		2					3							3				2	10	4	2.5	
2		2					2							2				1	7	4	1.8	
3		3					3							2				2	10	4	2.5	
FRENCH TOAST TOTAL		7					8							7				5	27	12	2.3	
Criterion 1																						
2																						
3																						
ONELET TOTAL			11	6	6				7	3	9	7	6				8	6	69	30	2.3	
Criterion 1		4	3	3	3	4	4	4	0	3	3	3	2		4	4	3	3	43	14	3.1	
2		4	3	3	4	4	4	4	0	1	3	1	1		4	4	3	2	40	14	2.9	
3		4	3	3	4	4	4	4	0	3	3	1	1		4	4	3	3	43	14	3.1	
CAKE TOTAL		12	9	9	11	12	12	12	0	7	9	4	4		12	12	9	8	126	42	3.0	
Criterion 1		2	3	3	3	3	3	3	2	3	4	2	2		4	2	2	3	39	14	2.8	
2		2	3	3	4	2	2	2	2	1	3	2	2		4	1	2	2	33	14	2.4	
3		2	3	3	4	2	2	2	2	2	3	3	3		4	2	1	2	35	14	2.5	
FROSTING TOTAL		6	9	9	11	7	7	7	6	6	10	7	7		12	5	5	7	107	42	2.5	
TOTAL		34	44	38	35	38	40	16	39	41	20	20	20		37	34	34	31	481			
CRITERION N		15	15	15	15	15	15	15	12	15	15	12	12		15	15	15	15	204			
MEAN		2.3	2.9	2.5	2.3	2.5	2.7	1.3	2.6	2.7	1.7	1.7	1.7		2.5	2.3	2.3	2.1	2.358			

ICI GROUP
15 JULYPROCEDURES RATINGS
Small Quantity Baking

STUDENT NUMBER -	1	2	3	7	8	9	10	11	12	14	16	17	18	22	23	33	34	35	TOTAL	N	MEAN
LAB ASSIGNMENT -	B	A	B	B	A	B	B	A	B	B	B	A	A	A	A	A	A	B	A		
Criterion 1	4	4	4	4	4	4	4	4	4	3	4	4	4	X	3	3	4	4	4	53	14 3.8
2	4	4	4	4	4	3	4	2	4	4	4	2	3	3	3	3	2	4	2	48	15 3.2
3	4	3	4	3	4	3	4	2	3	3	4	2	3	4	4	0	4	2	2	45	15 3.0
4	3	4	3	4	1	3	4	1	4	3	3	2	3	3	4	2	3	2	2	44	15 2.9
5	4	2	4	4	2	4	4	2	3	4	4	2	4	3	3	4	4	2	2	49	15 3.3
6	X	2	3	3	3	3	3	2	4	3	2	2	2	3	3	2	1	2	2	35	14 2.5
7	1	2	3	1	1	3	4	3	2	3	2	2	2	3	3	3	2	3	3	36	15 2.4
8	3	1	3	3	4	3	3	2	3	3	2	3	2	4	4	4	1	4	4	44	15 2.9
9	1	2	3	1	1	3	4	3	2	3	2	2	2	3	4	X	4	2	2	35	14 2.5
10	0	1	2	1	1	1	X	3	3	3	2	2	3	3	2	2	1	2	2	26	14 1.9
11	1	2	3	1	2	X	2	3	2	3	2	2	3	4	3	4	1	4	4	35	14 2.5
TOTAL	25	27	34	30	23	29	37	36	25	27	36	27	36	36	36	27	29	29	29	450	
CRITERION N	10	11	11	11	9	11	11	11	11	10	11	11	10	11	11	10	11	11	11	160	
MEAN	2.5	2.5	3.1	2.7	2.1	3.2	3.4	3.3	2.3	2.7	3.5	3.5	2.7	3.5	3.5	2.7	2.6	2.6	2.6	2.813	

SELF-PACED GROUP
15 JULY

PROCEDURES RATINGS
Small Quantity Baking

STUDENT NUMBER #	4	5	6	13	15	19	20	21	24	25	26	27	28	29	30	31	32	36	TOTAL	N	MEAN
LAB ASSIGNMENT	B	A	A	B	A	B	A	B	A	B	A	A	B	B	A	A	B	B			
Criterion 1	4			4	X	4	X	4	2	4	X	X		4	X	3	3		32	9	3.6
2	1			4	2	4	3	4	2	4	3	2		4	3	3	3		42	14	3.0
3	2			4	3	4	3	3	2	4	3	2		3	2	3	3		41	14	2.9
4	2			3	3	3	3	4	2	4	2	2		X	2	2	3		35	13	2.7
5	2			4	4	4	3	4	1	4	2	1		X	2	3	4		38	13	2.9
6	3			1	2	1	3	4	2	1	3	0		4	2	1	3		30	14	2.1
7	2			1	2	2	3	3	2	1	2	2		3	2	2	2		29	14	2.1
8	3			3	2	1	2	4	X	1	3	2		4	2	2	4		33	13	2.5
9	1			1	2	2	4	3	2	X	3	1		2	2	2	3		28	13	2.2
10	2			0	2	1	3	3	2	1	2	3		3	2	2	2		28	14	2.0
11	1			1	3	1	3	3	X	1	3	3		4	2	3	1		29	13	2.2
TOTAL	23			26	25	27	30	39	17	25	26	18		31	21	26	31		365		
CRITERION N	11			11	10	11	11	11	9	10	10	10		9	10	11	11			145	
MEAN	2.3			2.4	2.5	2.5	2.7	3.5	2.1	2.5	2.6	1.8		3.4	2.1	2.4	2.8			2.517	

ICI GROUP
15 JULY

CONFIDENCE/ATTITUDE INDICATOR RATINGS

Small Quantity Baking

STUDENT NUMBER -	1	2	3	7	8	9	10	11	12	14	16	17	18	22	23	33	34	35	TOTAL	N	MEAN
LAB ASSIGNMENT -	B	A	B	B	A	B	B	A	B	B	B	A	A	A	A	A	B	A			
Criterion 1			3	3		4	3	2	1	4	4	2	3	4	4	2	4	3	46	15	3.1
2			1	3		4	2	1	2	4	4	3	3	3	3	3	3	3	43	15	2.9
3			2	3		3	1	3	3	3	3	3	3	4	4	4	3	3	45	15	3.0
4			0	4		3	4	1	2	3	3	3	3	4	4	3	4	2	43	15	2.9
5			3	2		2	4	2	3	3	2	2	4	2	2	3	3	2	39	15	2.6
TOTAL			10	15		16	14	9	11	17	16	13	16	17	17	15	17	13	216		
CRITERION N			5	5		5	5	5	5	5	5	5	5	5	5	5	5	5		75	
MEAN			2.0	3.0		3.2	2.8	1.9	2.2	3.4	3.2	2.6	3.2	3.4	3.4	3.0	3.4	2.6			2.880

SELF-PACED GROUP
15 JULY

CONFIDENCE/ATTITUDE INDICATOR RATINGS
Small Quantity Baking

STUDENT NUMBER -	4	5	6	13	15	19	20	21	24	25	26	27	28	29	30	31	32	36	TOTAL	N	MEAN
LAB ASSIGNMENT -	B	A	A	B	A	B	A	B	A	B	A	A	B	B	A	A	B	B			
Criterion 1	3			2	3	3	3	3	1	3	3	2		4	2	2	2		36	14	2.6
2	3			1	2	3	3	3	1	2	3	2		4	2	3	3		35	14	2.5
3	2			2	2	3	3	4	1	1	3	2		4	2	3	3		35	14	2.5
4	3			3	3	4	3	3	1	4	3	2		4	3	3	3		42	14	3.0
5	1			3	4	2	3	3	2	1	3	2		3	3	3	2		35	14	2.5
TOTAL	12			11	14	15	15	16	6	11	15	10		19	12	14	13		183		
CRITERION N	5			5	5	5	5	5	5	5	5	5		5	5	5	5		70		
MEAN	2.4			2.2	2.8	3.0	3.0	3.2	1.2	2.2	3.0	2.0		3.6	2.2	2.8	2.6		2.614		

ICI GROUP
15 JULY

COOKING SKILLS RATINGS

STUDENT NUMBER -	1	2	3	7	8	9	10	11	12	14	16	17	18	22	23	33	34	35	TOTAL	N	MEAN
LAB ASSIGNMENT -	B	A	B	B	A	B	B	A	B	B	B	A	A	A	A	A	B	A			
Criterion 1	2	2			3	2	3	1	2	3	3	2	1	4	2		1	2	30	14	2.1
2	3	1			2	3	2	1	2	3	3	3	1	3	3		2	3	32	14	2.3
3	3	1			0	3	2	3	1	3	2	2	3	4	3		2	3	33	14	2.4
4	4	1			3	3	4	2	2	3	4	2	3	3	3		3	3	40	14	2.9
5	1	1			2	3	2	1	2	3	3	3	2	4	2		3	1	30	14	2.1
TOTAL	13	6			10	14	13	8	9	15	14	9	18	13			11	12	165		
CRITERION N	5	5			5	5	5	5	5	5	5	5	5	5	5		5	5		70	
MEAN	2.6	1.2			2.0	2.8	2.6	1.6	1.8	3.0	2.8	1.8	3.6	2.6			2.2	2.4			2.357

SELF-PACED GROUP
15 JULY

COOKING SKILLS RATINGS

STUDENT NUMBER -	4	5	6	13	15	19	20	21	24	25	26	27	28	29	30	31	32	36	TOTAL	N	MEAN
LAB ASSIGNMENT -	B	A	A	B	A	B	A	B	A	B	A	A	B	B	A	A	B	B			
Criterion 1	3		4	3	2	1	2	2	3	3	3	2	3	0	2	3	3	14	33	14	2.4
2	2		3	3	1	2	2	2	1	3	1	3	1	2	2	2	2	14	28	14	2.0
3	2		4	4	2	3	1	1	3	3	1	3	1	3	3	1	3	14	34	14	2.4
4	2		4	4	2	2	1	1	2	3	2	2	1	2	2	2	2	14	30	14	2.1
5	4		1	3	1	2	2	0	2	3	2	2	3	3	1	2	2	14	29	14	2.1
TOTAL	13		16	17	8	10	8	6	11	15	8	8	12	10	8	12	154				
CRITERION N	5		5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	70			
MEAN	2.6		3.2	3.4	1.8	2.0	1.8	1.2	2.2	3.0	1.6	2.4	2.0	1.6	2.4	2.4	2.2	2.200			

ICI GROUP
15 JULYCOMPLETION TASK RATINGS
Garrison Equipment

Student	1	2	3	7	8	9	10	11	12	14	16	17	18	22	23	33	34	35
Equipment	PE	A	CG	AB		CG	DH	DH	AE	DH	FB	CF	D	D	FB	CG	FB	A
1	31	2X	33	14	XX	44	23	32	20	33	33	32	1X	4X	24	34	44	2X
2	22	2X	34	14	XX	44	33	42	20	33	43	32	2X	4X	23	34	34	2X
3	21	2X	33	23	XX	44	23	42	10	43	34	42	1X	3X	23	34	34	2X
4	22	2X	33	23	XX	44	33	32	20	43	44	42	3X	4X	34	33	33	2X
5	21	1X	24	04	XX	33	44	43	10	43	23	20	3X	3X	24	23	34	1X
6	21	2X	24	04	XX	33	44	33	10	43	33	30	2X	4X	24	22	34	1X
7	20	2X	23	04	XX	33	44	42	20	43	32	21	4X	4X	24	22	41	2X
8	21	2X	23	24	XX	32	14	43	20	43	34	31	4X	4X	24	23	41	2X
9	21	2X	23	24	XX	32	34	33	20	42	23	31	4X	3X	23	23	44	2X
10	42	2X	34	12	XX	34	04	02	20	32	30	32	1X	3X	33	24	34	2X
11	42	2X	34	12	XX	34	24	22	20	32	33	32	2X	2X	34	24	43	2X
12	20	1X	22	10	XX	21	44	21	10	42	30	31	4X	4X	34	21	43	1X
13	20	1X	22	13	XX	21	34	31	10	32	34	31	3X	3X	34	22	31	1X
14	22	2X	24	12	XX	34	34	22	20	32	31	32	3X	2X	24	24	43	2X
15	22	2X	24	22	XX	34	14	22	10	32	32	32	XX	2X	24	24	43	2X
Total	35	18	27	45	0	47	39	43	24	53	45	45	37	49	34	56	53	26
Mean	2.2	1.8	2.4	3.0	0	3.1	2.6	2.9	1.8	3.5	3.0	3.0	2.6	3.3	2.3	2.3	3.0	1.7
Percent of Possible	58.3	45.0	83.3	75.0		78.3	65.0	71.7	46.0	88.3	75.0	75.0	61.7	81.7	58.3	56.7	88.3	48.3
TOTAL	53	27	89	62		94	95	75	24	91	84	66	37	49	91	81	98	26
MEAN	1.8	1.8	3.0	2.1		3.4	3.2	2.5	0.8	3.0	2.8	2.2	2.6	3.3	3.0	2.7	3.3	1.7
PERCENT	44.2	45.0	74.2	71.7		78.3	79.2	62.5	20.0	75.8	70.0	55.0	61.7	81.7	75.8	67.5	81.7	48.3

NOTES:

EQUIPMENT KEY

A = Milk Dispenser E = Deep Fat Fryer
 B = Hobart Mixer F = Convection Oven
 C = Coffee Urn G = Ice Cream Machine
 D = Meat Slicer H = Gas Griddle

ICI GROUP SUMMARY RATINGS

Total 1142
 Mean 2.5
 Percent of Possible 63.1

SELF-PACED GROUP
15 JULY

COMPLETION TASK RATINGS
Garrison Equipment

Student Equipment	4	5	6	13	15	19	20	21	24	25	26	27	28	29	30	31	32	36
	AH	FB		AH	DH	FG	A	C	C	C	FB	C		CG	DE	AH	DE	
1	XX	11	XX	22	32	12	0X	2X	2X	1X	24	1X	XX	32	11	23	21	XX
2	XX	12	XX	22	32	22	0X	2X	1X	1X	23	0X	XX	32	21	33	32	XX
3	XX	00	XX	12	32	12	0X	2X	2X	2X	24	0X	XX	32	10	23	21	XX
4	XX	02	XX	22	32	22	1X	2X	1X	2X	24	0X	XX	32	20	32	32	XX
5	XX	04	XX	21	43	10	0X	1X	1X	2X	23	0X	XX	11	21	42	41	XX
6	XX	04	XX	21	43	10	0X	1X	0X	2X	24	0X	XX	11	21	32	31	XX
7	XX	03	XX	21	23	10	0X	1X	0X	1X	24	0X	XX	11	21	32	31	XX
8	XX	03	XX	32	43	22	0X	2X	2X	1X	14	0X	XX	21	21	32	31	XX
9	XX	04	XX	22	43	21	0X	2X	2X	1X	24	0X	XX	22	21	32	21	XX
10	XX	04	XX	22	33	10	0X	3X	1X	1X	23	0X	XX	21	21	22	02	XX
11	XX	03	XX	22	33	10	0X	3X	1X	2X	24	0X	XX	21	21	22	12	XX
12	XX	13	XX	12	22	21	1X	2X	2X	1X	24	0X	XX	21	10	32	20	XX
13	XX	1X	XX	22	32	21	1X	2X	2X	1X	24	0X	XX	21	10	32	30	XX
14	XX	04	XX	22	22	10	0X	2X	2X	2X	24	0X	XX	21	21	32	22	XX
15	XX	03	XX	22	32	10	0X	2X	1X	2X	23	0X	XX	21	21	32	22	XX
Total	00	40	40	29	46	21	3	29	20	22	29	1	00	31	26	42	35	00
Mean		2.0	2.0	1.9	2.5	1.4	0.2	1.6	1.3	1.5	1.6	0.1		1.3	1.7	2.2	2.2	
Percent of Possible		6.7	6.7	46.3	76.7	35.0	5.0	46.3	35.3	36.7	46.3	1.7		33.3	43.3	70.0	58.3	
TOTAL	44			56	83	34	3	29	20	22	85	1		51	37	75	54	
MEAN	1.6			1.9	2.8	2.3	0.2	1.9	1.3	1.5	2.8	0.1		1.7	1.2	2.5	1.8	
PERCENT	37.5			46.7	69.2	56.7	5.0	48.3	35.3	36.7	70.8	1.7		42.5	30.8	62.5	45.0	

EQUIPMENT KEY

A = Milk Dispenser E = Deep Fat Fryer
 B = Hobart Mixer F = Convection Oven
 C = Coffee Urn G = Ice Cream Machine
 D = Meat Slicer H = Gas Griddle

SELF-PACED GROUP SUMMARY RATINGS

Total 594
 Mean 1.6
 Percent of Possible 43.1

ICI GROUP
15 JULY

Garrison Equipment
Composite Ratings on Equipment

STUDENT	Milk Dispenser	Mixing Machine	Coffee Urn	Meat Slicer	Deep Fat Fryer	Convection Oven	Ice Cream Machine	Gas Griddle
1	-	-	-	-	18	25	-	-
2	27	-	-	-	-	-	-	-
3	-	-	36	-	-	-	50	-
7	17	45	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-
9	-	-	47	-	-	-	47	-
10	-	-	-	39	-	-	-	56
11	-	-	-	43	-	-	-	32
12	24	-	-	-	0	-	-	-
14	-	-	-	53	-	-	-	38
16	-	39	-	-	-	45	-	-
17	-	-	45	-	-	21	-	-
18	-	-	-	37	-	-	-	-
22	-	-	-	49	-	-	-	-
23	-	56	-	-	35	-	-	-
33	-	-	-	34	-	53	47	-
34	-	45	-	-	-	-	-	-
35	26	-	-	-	-	-	-	-

TOTAL	97	185	128	255	18	189	144	126
CRITERION	60	60	45	90	30	75	45	45
N	1.6	3.1	2.8	2.8	0.6	2.5	2.2	2.8
MEAN	240	280	180	360	120	300	180	180
POSSIBLE	40.4	77.1	71.1	70.8	15.0	63.0	80.0	70.0
PERCENT OF POSSIBLE								

SELF-PACED GROUP
15 JULY
Garrison Equipment
Composite Ratings on Equipment

STUDENT	Milk Dispenser	Mixing Machine	Coffee Urn	Meat Slicer	Deep Fat Fryer	Convection Oven	Ice Cream Machine	Gas Griddle
4	-	-	-	-	-	-	-	-
5	-	41	-	-	-	4	-	-
6	-	-	-	-	-	-	-	-
13	29	-	-	-	-	-	-	27
15	-	-	-	46	-	-	-	37
19	-	-	-	-	-	21	-	-
20	3	-	-	-	-	-	13	-
21	-	-	29	-	-	-	-	-
24	-	-	20	-	-	-	-	-
25	-	-	22	-	-	-	-	-
26	-	56	-	-	-	29	-	-
27	-	-	1	-	-	-	-	-
28	-	-	-	-	-	-	-	-
29	-	-	31	-	-	-	20	-
30	-	-	-	26	11	-	-	-
31	42	-	-	-	-	-	33	-
32	-	-	-	35	19	-	-	-
36	-	-	-	-	-	-	-	-

TOTAL	74	96	103	187	30	54	66	64
CRITERION	45	30	75	45	30	45	45	60
N	1.6	3.2	1.4	2.4	1.0	1.2	1.5	2.1
MEAN	180	120	300	180	90	180	180	90
POSSIBLE	41.1	80.0	34.3	59.4	33.3	30.0	36.7	71.1
PERCENT OF POSSIBLE								

ICI GROUP
15 JULY

Garrison Equipment
Composite Ratings on Criteria

STUDENT	Check Equipment	Safety Precautions	Start-Operate Equipment	Stop Equipment	Disassemble Equipment	Clean Equipment	Reassemble Equipment
1	8	7	8	6	12	4	8
2	4	4	5	4	4	2	4
3	16	12	17	10	14	8	12
7	10	10	12	12	6	4	8
8	X	X	X	X	X	X	X
9	16	16	18	10	14	6	14
10	11	11	24	12	10	15	12
11	11	11	19	13	6	7	8
12	4	3	4	4	4	2	3
14	12	14	21	13	10	11	10
16	13	15	16	12	9	10	9
17	10	12	8	8	10	8	10
18	3	4	9	8	3	7	3
22	8	7	11	7	5	7	4
23	11	12	18	11	13	14	12
33	14	13	13	10	12	7	12
34	15	13	18	13	14	11	14
35	4	4	4	4	4	2	4
TOTAL	170	168	225	157	150	125	147
CRITERION N	60	60	89	60	60	60	59
MEAN	2.8	2.8	2.5	2.6	2.5	2.1	2.5
PERCENT OF POSSIBLE	70.8	70.0	62.5	65.4	62.5	52.1	61.3

SELF-PACED GROUP
15 JULY

Garrison Equipment
Composite Ratings on Criteria

STUDENT	Check Equipment	Safety Precautions	Start-Operate Equipment	Stop Equipment	Disassemble Equipment	Clean Equipment	Reassemble Equipment
4	X	X	X	X	X	X	X
5	5	2	11	7	7	5	7
6	X	X	X	X	X	X	X
13	8	7	9	9	8	7	8
15	10	10	19	14	12	9	9
19	7	7	3	7	2	6	2
20	0	1	0	0	0	2	0
21	4	4	3	4	6	4	4
24	3	3	1	4	2	4	3
25	2	4	5	2	3	2	4
26	11	12	17	11	11	12	11
27	1	0	0	0	0	0	0
28	X	X	X	X	X	X	X
29	10	10	6	7	6	6	6
30	5	3	9	6	6	2	6
31	11	10	16	10	8	10	10
32	8	8	13	7	5	5	5
36	X	X	X	X	X	X	X
TOTAL	85	81	112	88	76	74	78
CRITERION N	46	46	46	46	46	45	46
MEAN	1.8	1.8	2.4	1.9	1.7	1.6	1.7
PERCENT OF POSSIBLE	46.2	44.0	54.1	47.8	41.3	40.2	42.4

RECIPE CONVERSION SCORES

ICI GROUP Cycle 1			SELF-PACED GROUP Cycle 1		
Student	Items Correct	Percent	Student	Items Correct	Percent
1	1	5.3	4	-	-
2	0	0.0	5	5	26.3
3	7	36.8	6	-	-
7	8	42.1	13	7	36.8
8	-	-	15	6	31.6
9	4	21.1	19	1	5.3
10	5	26.3	20	1	5.3
11	9	47.4	21	8	42.1
12	-	-	24	2	10.5
14	8	42.1	25	4	21.1
16	6	31.6	26	9	47.4
17	0	0.0	27	4	21.1
18	6	31.6	28	-	-
22	11	57.9	29	0	0.0
23	3	15.8	30	16	84.2
33	7	36.8	31	5	26.3
34	11	57.9	32	0	0.0
36	5	26.3	36	-	-
STUDENTS N 16			14		
GROUP TOTAL		91			68
PERCENT OF POSSIBLE		29.9			25.6

Maximum possible score = 19 items correct

CYCLE 1 RATINGS

Reaction Surveys

ICI GROUP
15 JULYREACTION SURVEY
Task Competencies

TASK COMPETENCY	ICI GROUP			SELF-PACED GROUP		
	N	TOTAL	MEAN	N	TOTAL	MEAN
1. Read and follow recipe cards.	12	34	2.8	7	15	2.1
2. Prepare food for proper: taste and flavor	11	30	2.7	8	17	2.1
consistency and texture	11	29	2.6	8	15	1.9
appearance	11	29	2.6	8	15	1.9
garnish	11	28	2.5	8	19	1.9
3. Prepare and maintain work area.	12	35	2.9	8	20	2.5
4. Use sanitation and safety procedures.	12	35	2.9	8	23	2.9
5. Use "clean as you go" procedures.	12	33	2.8	8	19	2.4
6. Prepare food items without waste.	12	30	2.5	8	22	2.8
7. Use a knife properly to: slice	12	35	2.9	8	21	2.6
shred	12	29	2.4	8	17	2.1
cube	12	28	2.3	8	18	2.3
dice	12	33	2.8	7	16	2.3
chop	12	36	3.0	8	18	2.3
mince	12	36	3.0	8	20	2.5
8. Use procedures to: weigh dry ingredients	12	32	2.7	8	20	2.5
measure liquid ingredients	12	32	2.7	8	19	2.4
9. Use proper procedures for: soups	12	33	2.8	8	19	2.4
salads	11	31	2.8	8	24	3.0
basic sauces	11	28	2.5	8	15	1.9
10. Prepare bakery items: quick breads	12	28	2.3	8	15	1.5
cookies	12	27	2.3	8	19	2.4
cakes	12	32	2.7	8	20	2.5
rolls	12	31	2.6	8	17	2.1
pies	12	27	2.3	8	16	2.0
11. Prepare meat & other items by: baking	12	33	2.3	7	20	2.9
roasting	12	31	2.6	7	12	1.7
frying	11	33	3.0	7	18	2.6
braising	11	28	2.5	7	14	2.0
stewing or boiling	11	29	2.6	7	11	1.6
12. Start, operate, and maintain: mixer	12	34	2.8	8	23	2.9
slicer	12	33	2.8	8	13	1.6
coffee urn	12	34	2.8	8	8	1.0
milk dispenser	12	35	2.9	8	15	1.9
oven	12	32	2.9	8	19	2.4
deep fat fryer	11	29	2.6	8	16	2.0
13. Explain purpose & function of: mixer	11	31	2.8	8	22	2.8
slicer	11	30	2.7	8	14	1.8
coffee urn	11	33	3.0	8	8	1.0
milk dispenser	11	32	2.9	8	17	2.1
oven	11	27	2.5	8	16	2.0
deep fat fryer	11	28	2.5	8	14	1.8
14. Convert recipes.	11	25	2.3	7	6	0.9
15. Ask proper questions about preparing food	11	31	2.8	7	21	3.0
16. Ask proper questions about operating equip.	11	33	3.0	7	21	3.0
TOTALS	521	1342	2.6	350	763	2.2

ICI AND SELF-PACED GROUPS
15 JULY

B-91

REACTION SURVEY
The Training Program

ASPECTS OF TRAINING PROGRAM	ICI GROUP			SELF-PACED GROUP		
	N	TOTAL	MEAN	N	TOTAL	MEAN
1. Before each lesson, I was told what I was going to learn and why I needed to learn it.	12	47	3.9	8	22	2.8
(*) 2. My instructor demonstrated each thing I was to learn.	12	46	3.8	8	17*	2.1*
3. My instructor made sure I understood what to do before I actually did it.	12	46	3.8	8	26	3.3
4. I was told not only what I needed to <u>cor</u> <u>rect</u> but also what I was doing <u>right</u> .	12	40	3.3	8	26	3.3
5. My instructor had me learn the <u>reasons</u> for doing things in a particular way.	12	44	3.7	8	24	3.0
(*) 6. I was asked to explain what I was learning.	12	44	3.7	8	28	3.5*
(*) 7. During class, I was encouraged to share my ideas with other students.	12	43	3.6	8	2	0.3*
8. I was treated with respect by my instructor.	12	38	3.8	8	28	3.5
(@) 9. Time was wasted doing nothing or doing things that did not help me learn.	12	10	0.8	8	8	1.0
10. My instructor took the time to help me understand without "putting me down".	12	44	3.7	8	22	2.8
11. I was able to read and understand the written material I was given	12	39	3.3	8	26	3.3
12. The instruction was too fast for me to follow what was going on.	12	9	0.8	8	20	2.5
13. The instruction was too slow and I got bored.	12	20	1.7	8	6	0.8
UNADJUSTED TOTALS	156	505	3.237	104	271	2.606
(*) ADJUSTED TOTALS	120	372	3.100	80	224	2.800

NOTES:

(*) Statements apply only to ICI training. Ratings not counted in adjusted total.

(@) Ratings inverted for group totals because of the way statement is worded.

Evaluation
Learning Strategies Training Program
94B10
Fort Lee Virginia

DATA FROM CYCLE 2
Groups Starting Training 19 August 1981

ICI GROUP
Cycle 2--19 August
STUDENT CHARACTERISTICS
-- Personal in Nature --

STUDENT	No.	Lab	Comp.	Age	Sex	Race	Educ. Level	OF	GT	CO	FA	EL	GM	MM	CL	ST	SC	AIT FAIL
WASHINGTON	1	A	RA	20	F	N	12	86	93	95	104	68	56	74	110	84	93	0
EWING	2	A	RA	21	M	C	10	104	113	108	104	99	109	105	111	97	117	0
LIVINGSTON	3	B	RA	22	M	C	12	-	-	-	-	-	-	-	-	-	-	0
HANSON	4	A	RA	19	M	C	10	104	94	104	95	85	92	104	99	91	104	0
SANCHEZ	5	A	NG	29	M	Z	9	-	-	-	-	-	-	-	-	-	-	0
GLASS	6	A	MA	18	M	Z	12	91	90	100	102	80	78	89	107	77	103	0
DANIELS	7	A	AR	22	M	N	12	85	77(*)	81	75	86	95	90	80	83	85	0
LOGGINS	8	A	RA	18	M	N	11	86	93	82	81	85	83	86	84	84	82	0
COLLINS	9	A	RA	32	M	N	12	106	120	121	113	113	106	107	104	105	-	0
WADE	16	B	NG	19	M	C	12	93	92	103	93	84	88	84	118	77	92	0
WOOLEY	24	B	AR	22	M	N	12	85	71(*)	90	94	69	68	87	88	78	81	0
WOOD	25	B	NG	19	M	C	11	99	91	76	93	76	92	74	81	86	98	0
GREGG	26	B	RA	20	M	C	10	101	90	91	84	76	88	90	93	98	97	0
SOMMERS	27	B	RA	19	M	C	12	88	77(*)	69	80	83	78	84	65	79	76	0
BUTLER	28	B	RA	19	M	C	12	100	111	103	109	105	96	95	112	108	103	0
PARRIS	29	B	RA	18	F	C	12	81	91	95	98	79	74	82	94	85	88	0
GROUP AVERAGE			RA=11 AR=2 NG=3	21.1	M=14 F=2	C=9 Z=2	11.3	93.5	93.1	93.7	94.6	84.9	86.0	89.4	96.6	88.0	93.8	0

(*) Indicates course prerequisite of a standard score of 90 or higher in OF or GT was not met.

(-) Indicates data not available.

-- PERSONAL IN NATURE --

SELF-PACED GROUP
Cycle 2--19 August
STUDENT CHARACTERISTICS
-- Personal in Nature --

STUDENT	No.	Lab	Comp	Age	Sex	Race	Educ. Level	OF	GT	CO	FA	EL	GM	MM	CL	ST	SC	AIT
																		FAIL
DEWITT	10	B	RA	21	M	M	12	85	79(*)	79	78	72	71	84	92	70	88	0
JACKSON	11	B	RA	21	F	N	13	90	86	87	87	76	78	87	102	81	96	0
SURITA	12	B	EG	19	M	Z	0	-	-	-	-	-	-	-	-	-	-	0
MC CURDY	13	B	NG	20	M	C	11	105	90	126	108	98	105	102	112	114	126	0
JONES	14	B	RA	18	M	C	12	90	86	75	98	97	90	106	81	107	76	0
BRICELY	15	B	RA	19	M	Z	0	-	-	-	-	-	-	-	-	-	-	0
RODRIGUEZ	17	A	RA	18	M	C	12	94	84	93	84	93	98	91	91	88	82	0
KELLER	18	A	RA	20	F	C	12	85	98	94	105	96	86	82	102	94	93	0
DODDERER	19	A	RA	21	M	C	12	91	90	107	104	85	85	90	79	94	83	0
ADDINGTON	20	A	RA	19	F	Z	12	89	83(*)	87	87	77	78	71	93	80	88	0
SHEPPARD	21	A	RA	29	M	N	12	98	80	76	91	72	69	87	81	82	77	0
DOHRING	22	A	RA	19	M	C	12	92	120	98	103	113	108	89	100	107	97	0
GORDON	23	A	RA	18	M	N	12	85	95	95	86	74	79	85	86	80	84	0
CLOUGH	30	B	RA	18	M	C	10	92	100	87	86	99	99	90	96	96	82	0
GROUP AVERAGE			RA=12 AR=0 NG=2	19.4	M=11 F=3	C=7 N=4 Z=3	10.1	91.3	90.9 (*)=2	92.0	93.1	87.7	86.9	88.7	92.9	91.1	89.3	0

(*) Indicates course prerequisite of a standard score of 90 or higher in OF or GT was not met.
(-) Indicates data not available.

-- PERSONAL IN NATURE --

ICI GROUP
Cycle 2--19 August
COMPOSITE RATINGS
Percent of Possible Scores

Student	COOKING			BAKING			COMBINED			SKILLS	TOTAL
	Items	Procedures	Confidence	Items	Procedures	Confidence	Items	Procedures	Confidence	Cooking Skills	Total
POSSIBLE =	48	44	20	60	44	20	108	88	40	20	268
1 N	10	18	10	42	28	11	52	46	21	12	131
%	20.8	40.9	50.0	70.0	63.6	55.0	48.1	52.3	52.5	60.0	48.8
2 N	29	25	13	35	23	12	64	48	25	-	137
%	60.4	56.8	65.0	58.3	52.3	60.0	59.3	54.5	62.5	-	55.2(*)
3 N	-	-	-	-	-	-	-	-	-	6	6
%	-	-	-	-	-	-	-	-	-	30.0	30.0(**)
4 N	24	24	12	39	38	13	63	52	25	-	140
%	50.0	54.5	60.0	65.0	63.6	65.0	58.3	59.1	62.5	-	56.5(*)
5 N	33	27	12	48	28	16	81	55	28	-	164
%	68.6	61.4	60.0	80.0	63.6	80.0	75.0	62.5	70.0	-	66.1(*)
6 N	21	23	12	22	19	11	43	42	23	10	118
%	43.8	52.3	60.0	36.7	43.2	55.0	39.8	47.7	57.5	50.0	44.0
7 N	26	23	11	35	24	14	61	47	25	-	133
%	54.2	52.3	55.0	58.3	54.5	70.0	56.5	53.4	62.5	-	53.6(*)
8 N	18	32	12	38	29	18	56	61	30	11	158
%	37.5	72.7	60.0	63.3	65.9	90.0	51.9	69.3	75.0	55.0	59.0
9 N	26	33	16	47	18	11	73	51	27	14	165
%	54.2	75.0	80.0	78.3	40.1	55.0	67.6	58.0	67.5	70.0	61.6
16 N	28	26	15	34	30	17	62	56	32	-	150
%	58.3	59.1	75.0	56.7	68.2	85.0	57.4	63.6	80.0	-	60.5(*)
24 N	26	20	13	38	34	17	64	54	30	6	154
%	54.2	45.5	65.0	63.3	77.3	85.0	59.3	61.4	75.0	30.0	57.5
25 N	22	29	10	46	32	16	68	61	26	-	155
%	45.8	65.9	50.0	76.7	72.7	80.0	63.0	69.3	65.0	-	62.5(*)
26 N	27	18	10	36	26	14	63	44	24	8	139
%	56.3	40.9	50.0	60.0	59.1	70.0	58.3	50.0	60.0	40.0	51.9
27 N	29	30	15	42	35	15	71	65	30	8	174
%	60.4	68.2	75.0	70.0	79.5	75.0	65.7	73.9	75.0	40.0	64.9
28 N	33	31	19	41	25	16	74	56	35	12	177
%	68.8	70.5	95.0	68.3	56.8	60.0	68.5	63.6	87.5	60.0	66.0
29 N	20	25	12	43	24	13	63	49	25	7	144
%	41.7	56.8	60.0	71.7	54.5	65.0	58.3	55.7	62.5	35.0	53.7
GROUP N	372	384	192	586	403	214	958	787	406	94	2245
TOTAL %	51.7	58.2	64.0	65.1	61.1	71.3	59.1	59.6	67.7	47.0	57.270

(*) Adjusted. Absent from duty during Cooking Skills evaluation.

(**) Adjusted. Absent from duty during Small Quantity Cooking and Baking evaluation.

SELF-PACED GROUP
Cycle 2--19 August

B-97

COMPOSITE RATINGS
Percent of Possible Scores

Student		COOKING			BAKING			COMBINED			SKILLS	TOTAL
		Items	Procedures	Confidence	Items	Procedures	Confidence	Items	Procedures	Confidence	Cooking Skills	Total
		POSSIBLE = 48	44	20	60	44	20	108	88	40	20	268
10	N	31	34	15	37	28	15	68	62	30	-	160
	%	64.6	77.3	75.0	61.7	63.6	75.0	63.0	70.5	75.0	-	64.5(*)
11	N	25	19	10	36	31	12	61	50	22	12	145
	%	52.1	43.2	50.0	60.0	70.5	60.0	56.5	56.8	55.0	60.0	54.1
12	N	30	23	12	42	34	19	72	57	31	15	175
	%	62.5	52.3	60.0	70.0	77.3	95.0	66.7	64.8	77.5	75.0	65.3
13	N	18	31	17	37	21	13	55	52	30	17	154
	%	37.5	70.5	85.0	61.7	47.7	65.0	50.9	59.1	75.0	85.0	57.5
14	N	22	21	10	19	25	12	41	46	22	8	117
	%	45.8	47.7	50.0	31.7	56.8	60.0	38.0	52.3	55.0	40.0	43.7
15	N	25	36	17	35	22	12	60	58	29	7	154
	%	52.1	81.8	85.0	58.3	50.0	60.0	55.6	65.9	72.5	35.0	57.5
17	N	31	22	10	34	28	13	65	50	23	12	150
	%	64.6	50.0	50.0	56.7	61.4	65.0	60.2	56.8	57.5	60.0	56.0
18	N	26	23	13	30	27	12	56	50	25	7	138
	%	54.2	52.3	65.0	50.0	61.4	60.0	51.9	56.8	62.5	35.0	51.5
19	N	25	26	14	41	28	15	66	54	29	9	158
	%	52.1	59.1	70.0	68.3	61.4	75.0	61.1	61.4	72.5	45.0	59.0
20	N	18	20	11	28	21	12	46	41	23	11	121
	%	37.5	45.5	55.0	46.7	47.7	60.0	42.6	46.6	57.5	55.0	45.1
21	N	19	21	13	31	21	11	50	42	24	9	125
	%	59.6	47.7	65.0	51.7	47.7	55.0	46.3	47.7	60.0	45.0	46.6
22	N	23	23	13	36	30	14	59	53	27	10	149
	%	47.9	52.3	65.0	60.0	68.2	70.0	54.6	60.2	67.5	50.0	55.6
23	N	21	23	9	31	22	12	52	45	21	-	118
	%	43.8	52.3	45.0	51.7	50.0	60.0	48.1	51.1	52.5	-	47.6(*)
30	N	13	22	8	35	29	18	48	51	26	7	132
	%	27.1	50.0	40.0	58.3	65.9	90.0	44.4	58.0	65.0	35.0	49.3
GROUP	N	327	344	172	472	367	190	799	711	362	124	1996
TOTAL	%	48.7	55.8	62.3	56.2	59.6	67.9	52.8	57.7	64.6	51.7	53.770

(*) Adjusted. Absent from duty during Cooking Skills evaluation.

ICI GROUP
Cycle 2--19 August
COMPOSITE RATINGS
Summary by Tasks

Student	Lab	SMALL QUANTITY COOKING						SMALL QUANTITY BAKING						TOTAL	CRITERION	N	MEAN
		Salat	Soup	Entree	Vegetable	Procedures	Confidence	Biscuits	Muffins	French Toast	Omelet	Cake	Frosting	Procedures	Confidence	Cooking Skills	
1	A	4	-	6	-	18	10	5	9	6	-	11	11	28	11	12	131 58 2.3
2	A	7	9	7	6	25	13	11	8	-	11	5	0	23	12	-	137 59 2.3
3	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	6 5 1.2
4	A	7	7	5	5	24	12	9	3	8	-	12	7	28	13	-	150 59 2.4
5	A	7	8	8	10	27	12	12	5	-	7	12	12	28	16	-	164 59 2.8
6	A	5	3	7	6	23	12	0	5	-	3	8	6	19	11	10	118 64 1.8
7	A	7	7	7	5	23	11	3	7	-	7	8	10	24	14	-	133 59 2.3
8	A	6	-	9	3	32	12	9	6	9	-	7	7	39	18	11	158 61 2.6
9	A	7	6	7	6	33	16	11	6	-	9	11	10	18	11	14	165 64 2.6
16	B	12	9	3	4	26	15	3	6	-	7	10	8	30	17	-	150 59 2.5
24	B	9	6	6	5	20	13	5	9	-	9	8	7	34	17	6	154 64 2.4
25	B	6	7	4	5	29	10	12	6	-	6	11	11	32	16	-	155 59 2.6
26	B	6	8	5	8	18	10	7	7	4	-	11	7	26	14	8	139 64 2.2
27	B	6	6	8	9	30	15	6	7	-	6	11	12	35	15	8	174 64 2.7
28	B	8	6	10	9	31	19	8	7	-	8	10	8	25	16	12	177 64 2.8
29	B	5	4	5	6	25	12	8	8	7	-	11	9	24	13	7	144 64 2.3
TOTAL		102	86	97	87	384	192	109	99	34	73	146	125	403	214	94	2245
CRITERION N		45	39	45	42	165	75	45	45	15	30	45	45	165	75	50	926
MEAN		2.3	2.2	2.2	2.1	2.3	2.6	2.4	2.2	2.3	2.4	3.2	2.8	2.4	2.9	1.9	2.424

SELF-PACED GROUP
Cycle 2--19 August
COMPOSITE RATINGS
Summary by Tasks

Student	Lab	SMALL QUANTITY COOKING										SMALL QUANTITY BAKING				SKILLS		TOTALS	
		Saled	Soup	Entree	Vegetable	Procedures	Confidence	Biscuits	Muffins	French Toast	Omelet	Cake	Frosting	Procedures	Confidence	Cooking Skills	TOTAL	CRITERION	MEAN
10	B	6	11	6	8	34	15	7	9	6	-	9	6	28	15	-	160	59	2.7
11	B	6	3	7	9	19	10	7	6	7	-	9	7	31	12	12	145	64	2.3
12	B	12	6	6	6	23	12	9	8	12	-	6	7	34	19	15	175	64	2.7
13	B	-	9	6	3	31	17	6	8	-	7	9	7	21	13	17	154	61	2.5
14	B	6	5	6	5	21	10	3	3	5	8	-	-	25	12	18	117	61	1.9
15	B	7	3	8	7	36	17	7	9	3	-	7	9	22	12	7	154	64	2.4
17	A	7	8	7	9	22	10	3	3	-	6	11	11	13	12	12	150	64	2.3
18	A	10	-	5	11	23	13	5	3	7	-	9	6	27	12	7	138	61	2.3
19	A	6	8	5	6	26	14	4	5	8	-	12	12	28	15	9	158	64	2.5
20	A	-	8	7	3	20	11	0	6	-	7	8	7	21	12	11	121	61	2.0
21	A	4	-	9	6	21	13	4	5	10	-	6	6	21	11	9	125	61	2.0
22	A	4	7	6	6	23	13	6	9	7	-	7	7	30	14	10	149	64	2.3
23	A	3	-	9	9	23	9	3	8	6	-	8	6	22	12	-	118	56	2.1
30	B	-	3	6	4	22	8	4	8	9	-	8	6	29	18	7	132	64	2.1
TOTAL		71	71	93	92	344	172	68	90	80	28	109	97	367	190	124	1996		
CRITERION M		33	33	42	42	154	69	42	42	33	12	39	39	154	70	60		864	
MEAN		2.2	2.2	2.2	2.2	2.2	2.5	1.6	2.1	2.4	2.3	2.8	2.5	2.4	2.7	2.1			2.310

FREQUENCY OF RATING SCORES

Cycle 2 -- 19 August

Completion Tasks -- Food Items
Small Quantity Cooking and Baking

	FOOD ITEM	ICI GROUP					RATINGS	SELF-PACED GROUP				
		0	1	2	3	4		0	1	2	3	4
1	Potato Salad Waldorf Salad	0	3	10	1	1		0	3	6	1	1
2	Vegetable Soup Mulligatawny Soup	0	2	9	2	0		0	4	5	2	0
3	Baked Macaroni and Cheese Chicken Fried Steak	0	5	8	2	0		0	2	10	2	0
4	French Fried Onion Rings Cauliflower Au Gratin	0	6	5	3	0		0	4	6	4	0
5	Baking Powder Biscuits	1	4	4	4	2		1	7	5	1	0
6	Plain Muffins	0	3	10	2	0		0	5	6	3	0
7	French Toast	0	1	3	1	0		0	2	6	2	1
8	Plain Omelet	0	1	6	3	0		0	0	4	0	0
9	Chocolate Cake	0	1	4	8	2		0	0	7	5	1
10	Butter Cream Frosting	1	0	7	5	2		0	0	10	2	1
	TOTAL	2	26	66	31	7		1	27	65	22	4
	PERCENT OF TOTAL	1.5	19.7	50.0	23.5	5.3		0.8	22.7	54.6	18.5	3.4

KEY TO RATING SCORES

- 0 - Not present (not done).
- 1 - Present (done) but not minimally acceptable.
- 2 - Present (done) but only minimally acceptable (MALP).
- 3 - Present (done) above MALP.
- 4.- Present (done) at desired level for given conditions (DLP).

FREQUENCY OF RATING SCORES
Cycle 2 -- 19 August

8-101

Completion Tasks -- Food Items
Small Quantity Cooking and Baking

CRITERION	ICI GROUP					SELF-PACED GROUP				
	0	1	2	3	4	0	1	2	3	4
CRITERION 1--Taste/Flavor	2	11	50	51	18	1	19	48	46	5
CRITERION 2--Appearance	2	20	59	37	14	1	21	61	27	9
CRITERION 3--Texture/Consistency	2	21	53	37	19	1	24	50	35	9
TOTALS	6	52	162	125	51	3	64	159	108	23
PERCENT OF TOTAL	1.5	13.1	40.9	31.6	12.9	0.8	17.9	44.5	30.3	6.4

STUDENT ACHIEVEMENT

Completion Tasks -- Food Items

(Based on ratings average of all criteria for each item prepared.)

ICI GROUP (Based on 132 items prepared)	SELF-PACED GROUP (Based on 119 items prepared)
7 (5.3%) prepared at DLP	4 (3.4%) prepared at DLP
97 (73.5%) prepared at or above MALP	87 (73.1%) prepared at or above MALP
28 (21.2%) prepared below MALP (nogo)	28 (23.5%) prepared below MALP (nogo)

KEY TO RATING SCORES

- 0 - Not present (not done).
- 1 - Present (done) but not minimally acceptable.
- 2 - Present (done) but only minimally acceptable (MALP).
- 3 - Present (done) above MALP.
- 4 - Present (done) at desired level for given conditions (DLP).

FREQUENCY OF RATING SCORES

Cycle 2 -- 19 August

Procedures
Small Quantity Cooking and Baking

CRITERION	ICI GROUP					RATINGS	SELF-PACED GROUP				
	0	1	2	3	4		0	1	2	3	4
CRITERION 1--Washed Hands.	1	0	8	12	9		0	1	6	14	7
CRITERION 2--Read complete recipe.	0	3	10	13	4		0	4	11	12	1
CRITERION 3--Checked equipment to be used.	0	1	13	15	1		1	3	11	11	2
CRITERION 4--Assembled all needed utensils.	0	2	13	12	3		0	2	11	12	3
CRITERION 5--Assembled all needed ingredients.	0	2	13	12	3		0	1	13	12	2
CRITERION 6--Followed the recipe procedures.	0	4	18	8	0		0	10	10	8	0
CRITERION 7--Used proper sanitation and safety proced.	0	9	12	8	1		1	8	14	5	0
CRITERION 8--Prepared food item without waste.	2	2	8	15	3		0	2	12	12	2
CRITERION 9--Performed each cooking skill properly.	1	8	12	9	0		0	8	10	10	0
CRITERION 10--Used "clean as you go" procedures.	0	4	16	10	0		1	6	15	5	1
CRITERION 11--Cleaned self/utensils/work area after completion of task.	1	5	10	13	1		1	4	14	8	1
TOTALS	5	40	133	127	25		4	49	127	109	19
PERCENT OF TOTAL	1.5	12.1	40.3	38.5	7.6		1.3	15.9	41.2	35.4	6.2

STUDENT ACHIEVEMENT

Procedures

(Based on ratings average of all criteria for each student observation.)

ICI GROUP

(Based on 30 student observations)

0 (0.0%) performed at DLP
 25 (83.3%) performed at or above MALP.
 5 (16.7%) performed below MALP (nogo)

SELF-PACED GROUP

(Based on 29 student observations)

0 (0.0%) performed at DLP
 25 (86.2%) performed at or above MALP
 4 (13.8%) performed below MALP (nogo)

FREQUENCY OF RATING SCORES

8-103

Cycle 2 -- 19 August

Confidence/Attitude Indicators
Small Quantity Cooking and Baking

CRITERION	ICI GROUP					SELF-PACED GROUP				
	0	1	2	3	4	0	1	2	3	4
CRITERION 1--Proceeded with the task without false starts or trial/error activity.	0	2	8	16	4	0	2	10	14	2
CRITERION 2--Attended to own actions and did not look to others for help or guidance.	0	2	6	19	3	0	1	9	14	4
CRITERION 3--Stayed focused on the task and did not create or participate in irrelevant conversation or activity.	0	2	7	15	6	0	1	6	19	2
CRITERION 4--When difficulties arose, remained "cool under fire" and took actions to overcome them.	0	0	11	17	2	0	0	12	15	1
CRITERION 5--Showed concern for quality by checking results of actions as he/she progressed through the preparation tasks.	0	5	7	16	2	0	7	8	9	3
TOTALS	0	11	39	83	17	0	11	45	71	12
PERCENT OF TOTAL	0.0	7.3	26.0	53.3	11.3	0.0	7.9	32.4	51.1	8.6

STUDENT ACHIEVEMENT

Confidence/Attitude Indicators

(Based on ratings average of all criteria for each student observation.)

ICI GROUP

(Based on 30 student observations)

0 (0.0%) performed at DLP
30 (100%) performed at or above MALP
0 (0.0%) performed below MALP (nogo)

SELF-PACED GROUP

(Based on 28 student observations)

0 (0.0%) performed at DLP
27 (96.4%) performed at or above MALP
1 (3.6%) performed below MALP (nogo)

FREQUENCY OF RATING SCORES

Cycle 2 -- 19 August

Cooking Skills

CRITERION	ICI GROUP					RATINGS	SELF-PACED GROUP				
	0	1	2	3	4		0	1	2	3	4
CRITERION 1--Finely shredded fresh cabbage.	0	3	5	2	0		0	0	10	1	1
CRITERION 2--Diced fresh sweet pepper (1/2 inch).	0	5	3	2	0		0	2	8	1	1
CRITERION 3--Sliced fresh pared cucumber (1/8 inch).	0	4	3	3	0		1	1	5	4	1
CRITERION 4--Cutting tomato wedges (8).	0	0	7	2	1		0	5	4	2	1
CRITERION 5--Making a brown roux.	2	3	4	0	1		2	1	7	1	1
TOTALS	2	15	22	9	2		3	9	34	9	5
PERCENT OF TOTAL	4.0	30.0	44.0	18.0	4.0		5.0	15.0	56.7	15.0	8.3

STUDENT ACHIEVEMENT

Cooking Skills

(Based on ratings average of all criteria for each student observation.)

(Based on 10 student observations)

0 (0.0%) performed at DLP
 5 (50.0%) performed at or above MALP
 5 (50.0%) performed below MALP (nogo)

(Based on 12 student observations)

0 (0.0%) performed at DLP
 6 (50.0%) performed at or above MALP
 6 (50.0%) performed below MALP (nogo)

FREQUENCY OF RAW SCORES

B-105

Recipe Conversion

NUMBER CORRECT	ICI GROUP	SELF-PACED GROUP
0	3	1
1	2	1
2	1	0
3	1	1
4	1	0
5	0	1
6	0	2
7	0	2
8	2	2
9	0	0
10	1	0
11	0	0
12	1	2
13	0	1
14	2	0
15	0	1
16	0	0
17	2	0
18	0	0
19	0	0

STUDENT ACHIEVEMENT

Recipe Conversion
(Based on number of items correct.)

ICI GROUP
(Based on 16 student tested)

7 (43.8%) got 0-3 answers correct
 1 (6.3%) got 4-7 answers correct
 3 (18.8%) got 8-11 answers correct
 3 (18.8%) got 12-15 answers correct
 2 (12.5%) got 15-19 answers correct

SELF-PACED GROUP
(Based on 14 students tested)

3 (21.4%) got 0-3 answers correct
 5 (35.7%) got 4-7 answers correct
 2 (14.3%) got 8-11 answers correct
 4 (28.6%) got 12-15 answers correct
 0 (0.0%) got 15-19 answers correct

FREQUENCY OF RATING SCORES

Garrison Equipment
(Based on average ratings for each equipment item.)

EQUIPMENT ITEM	ICI GROUP					RATINGS					SELF-PACED GROUP				
	0	1	2	3	4						0	1	2	3	4
Milk Dispenser	0	0	3	2	0						0	1	2	0	0
Hobart Mixer	0	0	2	2	1						0	2	1	0	0
Coffee Urn	0	2	2	0	0						2	1	0	0	0
Meat Slicer	0	2	1	0	0						1	2	0	0	0
Deep Fat Fryer	0	2	1	0	0						1	1	0	0	0
Convection Oven	0	1	2	0	0						0	3	2	0	0
Ice Cream Machine	0	0	2	0	0						1	4	0	0	0
Gas Griddle	0	0	6	0	0						0	0	3	0	0
TOTALS	0	7	19	4	1						5	14	8	0	0
PERCENT OF TOTAL	0.0	22.6	61.3	12.9	3.2						18.5	51.9	29.6	0.0	0.0

Garrison Equipment
(Based on individual ratings for each equipment item.)

EQUIPMENT ITEM	ICI GROUP					RATINGS					SELF-PACED GROUP				
	0	1	2	3	4						0	1	2	3	4
Milk Dispenser	0	1	13	34	27						0	14	21	10	0
Hobart Mixer	0	2	21	16	36						2	6	33	4	0
Coffee Urn	2	18	34	6	0						16	25	4	0	0
Meat Slicer	0	10	27	8	0						2	31	12	0	0
Deep Fat Fryer	0	11	25	9	0						14	16	0	0	0
Convection Oven	0	0	18	26	1						0	14	55	6	0
Ice Cream Machine	0	4	14	9	3						12	39	17	7	0
Gas Griddle	0	1	25	64	0						0	0	20	25	0
TOTALS	2	47	177	172	67						46	145	162	52	0
PERCENT OF TOTAL	0.4	10.0	38.1	37.0	14.4						11.4	35.8	40.0	12.8	0.0

STUDENT ACHIEVEMENT

(Based on ratings average of all criteria for each student observation.)

ICI GROUP	SELF-PACED GROUP
(Based on 31 student observations)	(Based on 27 student observations)
1 (3.2%) performed at DLP	0 (0.0%) performed at DLP
24 (77.4%) performed at or above MALP	8 (29.6%) performed at or above MALP
6 (19.4%) performed below MALP (nogo)	19 (70.4%) performed below MALP (nogo)

FREQUENCY OF RATING SCORES

B-107

Garrison Equipment

CRITERION	ICI GROUP					RATINGS	SELF-PACED GROUP				
	0	1	2	3	4		0	1	2	3	4
CRITERION 1--Checked equipment before starting to operate it.	0	1	12	15	3		1	9	13	4	0
CRITERION 2--Explained purpose for checking.	0	1	10	16	4		1	8	13	5	0
CRITERION 3--Observed all safety precautions before operating.	0	4	10	11	6		2	8	11	6	0
CRITERION 4--Explained importance of safety precautions.	0	1	12	12	6		2	7	11	7	0
CRITERION 5--Took the proper actions to start the equipment.	0	2	15	9	5		4	10	12	1	0
CRITERION 6--Took the proper actions to operate the equipment.	0	3	16	7	5		5	9	12	1	0
CRITERION 7--Explained starting and operating procedures.	0	3	11	13	4		3	13	9	2	0
CRITERION 8--Took the proper actions to stop the operation.	0	1	14	11	5		4	13	8	2	0
CRITERION 9--Explained procedure for stopping the operation.	0	1	16	10	4		2	10	12	2	0
CRITERION 10--Took proper actions to disassemble for cleaning.	1	4	9	13	4		1	14	8	4	0
CRITERION 11-- Explained dis-assembling procedure.	1	4	8	13	5		4	8	10	5	0
CRITERION 12--Took proper actions to clean equipment.	0	6	12	10	3		5	8	10	4	0
CRITERION 13--Explained cleaning procedure.	0	7	9	12	3		5	9	10	3	0
CRITERION 14--Took proper actions to assemble equipment.	0	5	11	10	5		3	10	11	3	0
CRITERION 15--Explained assembling procedure.	0	4	12	10	5		3	9	12	3	0
TOTALS	2	47	177	172	67		46	145	162	52	0
PERCENT OF TOTAL	0.4	10.1	38.1	37.0	14.4		11.4	35.8	40.0	12.8	0.0

KEY TO RATING SCORES

- 0 - Did not do
- 1 - Did but not minimally acceptable
- 2 - Did at minimum acceptable level of performance (MALP).
- 3 - Did above MALP but not to desired level.
- 4 - Did at desired level of performance for given conditions (DLP).

ICI GROUP
Cycle 2--19 August
COMPLETION TASK RATINGS
Small Quantity Cooking

STUDENT NUMBER	1	2	3	4	5	6	7	8	9	16	24	25	26	27	28	29	TOTAL	N	MEAN
LAB ASSIGNMENT	A	A	B	A	A	A	A	A	A	B	B	B	B	B	B	B			
Criterion 1	1	3	-	2	3	3	2	2	3	4	3	2	2	2	3	2	37	15	2.5
2	2	2	-	3	2	1	2	2	2	4	3	1	2	2	2	1	31	15	2.1
3	1	2	-	2	2	1	3	2	2	4	3	3	2	2	3	2	34	15	2.3
SALAD TOTAL	4	7	-	7	7	5	7	6	7	12	9	6	6	6	8	5	102	45	2.3
Criterion 1	-	3	-	3	3	1	3	-	3	3	2	2	3	2	2	1	31	13	2.4
2	-	3	-	3	2	1	2	-	2	3	2	3	2	2	2	2	29	13	2.3
3	-	3	-	1	3	1	2	-	1	3	2	2	3	2	2	1	26	13	2.0
SOUP TOTAL	-	9	-	7	8	3	7	-	6	9	6	7	8	6	6	4	86	39	2.2
Criterion 1	2	3	-	2	3	3	2	3	2	1	2	1	1	3	3	2	33	15	2.2
2	2	2	-	2	2	1	3	3	3	1	2	2	2	2	3	1	31	15	2.1
3	2	2	-	1	3	3	2	3	2	1	2	1	2	3	4	2	33	15	2.2
ENTREE TOTAL	6	7	-	5	8	7	7	9	7	3	6	4	5	8	10	5	97	45	2.2
Criterion 1	-	2	-	2	3	2	2	1	2	2	2	2	3	3	3	2	31	14	2.2
2	-	3	-	2	4	2	2	1	2	1	1	1	2	3	3	2	29	14	2.1
3	-	1	-	1	3	2	1	1	2	1	2	2	3	3	3	2	27	14	1.9
VEGETABLE TOTAL	-	6	-	5	10	6	5	3	6	4	5	5	8	9	9	6	87	42	2.1
TOTAL	10	29	-	24	33	21	26	18	26	28	26	22	27	29	33	20	372		
CRITERION N	6	12	-	12	12	12	12	9	12	12	12	12	12	12	12	12	171		
MEAN	1.7	2.4	-	2.0	2.6	1.8	2.2	2.0	2.2	2.3	2.2	1.8	2.3	2.4	2.8	1.7	2.175		

SELF-PACED GROUP
Cycle 2--19 August

COMPLETION TASK RATINGS
Small Quantity Cooking

STUDENT NUMBER	10	11	12	13	14	15	17	18	19	20	21	22	23	30	TOTAL	N	MEAN
LAB ASSIGNMENT	B	B	B	B	B	B	A	A	A	A	A	A	A	B			
Criterion 1	2	2	4	-	2	3	2	3	3	-	1	2	1	-	25	11	2.3
2	2	2	4	-	2	2	2	4	2	-	2	1	1	-	24	11	2.2
3	2	2	4	-	2	2	3	3	1	-	1	1	1	-	22	11	2.0
SALAD TOTAL	6	6	12	-	6	7	7	10	6	-	4	4	3		71	33	2.2
Criterion 1	3	1	2	3	1	1	3	-	3	2	-	2	-	1	22	11	2.0
2	4	1	2	3	2	1	2	-	2	3	-	2	-	1	23	11	2.1
3	4	1	2	3	2	1	3	-	3	3	-	3	-	1	26	11	2.4
SOUP TOTAL	11	3	6	9	5	3	8	-	8	8	-	7	-	3	71	33	2.2
Criterion 1	2	2	2	2	2	3	2	1	2	2	3	2	3	2	30	14	2.1
2	2	2	2	2	2	3	3	3	2	3	3	1	3	2	32	14	2.3
3	2	3	2	2	2	3	2	1	1	2	3	3	3	2	31	14	2.2
ENTIRE TOTAL	6	7	6	6	6	8	7	5	5	7	9	6	9	6	93	42	2.2
Criterion 1	4	3	2	1	3	2	3	3	2	1	2	2	3	1	32	14	2.3
2	2	3	2	1	1	3	3	4	2	1	2	1	3	1	30	14	2.1
3	2	3	2	1	1	2	3	4	2	1	2	3	3	1	30	14	2.1
VEGETABLE TOTAL	8	9	6	3	5	7	9	11	6	3	6	6	9	4	92	42	2.2
TOTAL	31	25	30	18	22	25	31	26	25	18	19	23	21	13	327		
CRITERION N	12	12	12	9	12	12	12	9	12	9	9	12	9	9	150		
MEAN	2.6	2.1	2.5	2.0	1.8	2.1	2.6	2.9	2.1	2.0	2.1	1.9	2.3	1.4	2.180		

ICI GROUP
Cycle 2--19 August
PROCEDURES RATINGS
Small Quantity Cooking

STUDENT NUMBER	1	2	3	4	5	6	7	8	9	16	24	25	26	27	28	29	TOTAL	N	MEAN
LAB ASSIGNMENT	A	A	B	A	A	A	A	A	A	B	B	B	B	B	B	B			
Criterion 1	0	3	-	3	3	4	4	3	4	3	2	2	2	2	4	4	43	15	2.9
2	2	2	-	1	3	2	2	4	3	3	2	3	2	2	3	3	37	15	2.5
3	1	2	-	2	3	2	2	3	2	3	2	3	2	2	3	3	35	15	2.3
4	2	2	-	2	3	1	1	3	3	4	2	2	2	3	3	3	36	15	2.4
5	3	2	-	2	2	3	1	3	3	2	2	3	2	4	2	2	36	15	2.4
6	1	1	-	2	2	2	2	3	3	2	1	3	2	2	2	2	30	15	2.0
7	1	3	-	1	2	2	3	2	3	3	2	1	1	3	4	1	32	15	2.1
8	3	3	-	3	2	2	2	3	3	3	2	3	0	3	3	2	37	15	2.5
9	1	1	-	2	2	2	1	3	3	1	0	3	2	2	3	2	28	15	1.9
10	2	3	-	3	2	1	3	2	3	2	2	3	1	3	3	2	35	15	2.3
11	2	3	-	3	3	2	2	3	3	0	3	3	2	4	1	1	35	15	2.3
TOTAL	18	25	-	24	27	23	23	32	33	26	20	29	18	30	31	25	384		
CRITERION N	11	11	-	11	11	11	11	11	11	11	11	11	11	11	11	11		165	
MEAN	1.6	2.3	-	2.2	2.5	2.1	2.1	2.9	3.0	2.4	1.8	2.6	1.6	2.7	2.8	2.3			2.327

SELF-PACED GROUP
Cycle 2--19 August
PROCEDURES RATINGS
Small Quantity Cooking

STUDENT NUMBER	10	11	12	13	14	15	17	18	19	20	21	22	23	30	TOTAL	N	MEAN
LAB ASSIGNMENT	B	B	B	B	B	B	A	A	A	A	A	A	A	A			
Criterion 1	2	2	2	4	3	3	3	3	3	3	4	4	4	1	41	14	2.9
2	2	2	2	2	2	4	1	2	3	2	2	3	2	2	31	14	2.2
3	2	2	2	4	0	4	2	1	3	2	2	2	1	2	29	14	2.1
4	4	2	2	3	2	4	2	1	2	2	1	2	3	2	32	14	2.3
5	4	2	2	3	2	3	2	2	2	2	1	3	2	3	33	14	2.4
6	3	1	2	2	1	3	1	1	3	1	2	2	2	2	26	14	1.9
7	3	1	2	3	2	3	0	3	2	1	2	1	2	2	27	14	1.9
8	3	2	2	4	2	4	3	3	2	3	2	2	2	3	37	14	2.6
9	3	2	2	2	2	3	2	1	1	1	2	2	1	3	27	14	1.9
10	4	1	2	3	2	2	3	3	2	1	1	0	2	2	28	14	2.0
11	4	2	3	1	3	3	3	3	3	2	2	2	2	0	33	14	2.4
TOTAL	34	19	23	31	21	36	22	23	26	20	21	23	23	22	344		
CRITERION N	11	11	11	11	11	11	11	11	11	11	11	11	11	11	154		
MEAN	3.1	1.7	2.1	2.8	1.9	3.3	2.0	2.1	2.4	1.8	1.9	2.1	2.1	2.0	2.234		

ICI GROUP
Cycle 2--19 August
CONFIDENCE/ATTITUDE INDICATOR RATINGS
Small Quantity Cooking

STUDENT NUMBER	-	1	2	3	4	5	6	7	8	9	16	24	25	26	27	28	29	TOTAL	N	MEAN
LAB ASSIGNMENT	-	A	A	B	A	A	A	A	A	A	B	B	B	B	B	B	B			
Criterion 1		2	3	-	2	3	3	3	3	3	3	3	2	2	3	4	1	40	15	2.7
2		1	3	-	1	3	3	2	2	4	3	3	3	2	3	4	3	40	15	2.7
3		3	3	-	3	2	2	2	1	3	4	3	2	2	3	4	3	40	15	2.7
4		3	3	-	3	3	2	2	3	3	3	2	2	2	3	3	2	39	15	2.6
5		1	1	-	3	1	2	2	3	3	2	2	1	2	3	4	3	33	15	2.2
TOTAL		10	13	-	12	12	12	11	12	16	15	13	10	10	15	19	12	192		
CRITERION N		5	5	-	5	5	5	5	5	5	5	5	5	5	5	5	5		75	
MEAN		2.0	2.6	-	2.4	2.4	2.4	2.2	2.4	3.2	3.0	2.6	2.0	2.0	3.0	3.8	2.4			2.560

SELF-PACED GROUP
Cycle 2--19 August
CONFIDENCE/ATTITUDE INDICATOR RATINGS
Small Quantity Cooking

STUDENT NUMBER	=	10	11	12	13	14	15	17	18	19	20	21	22	23	30	TOTAL		N	MEAN												
LAB ASSIGNMENT	=	B	B	B	B	B	B	A	A	A	A	A	A	A	B																
Criterion 1		3	2	2	3	1	3	2	3	3	2	2	3	1	2	32	14	2.3													
2		3	2	3	4	2	4	1	3	3	2	3	3	2	2	37	14	2.6													
3		3	2	3	4	3	3	3	3	3	3	3	3	2	1	39	14	2.8													
4		3	2	2	3	2	3	3	3	3	3	2	3	2	3	37	14	2.6													
5		3	2	2	3	2	4	1	1	2	1	3	1	2	-	27	13	2.1													
TOTAL																15	10	12	17	10	17	10	13	14	11	13	13	9	8	172	
CRITERION N																5	5	5	5	5	5	5	5	5	5	5	5	5	4	69	
MEAN																3.0	2.0	2.4	3.4	2.0	3.4	2.0	2.6	2.8	2.2	2.6	2.6	1.8	2.0	2.493	

ICI GROUP
Cycle 2--19 AugustCOMPLETION TASK RATINGS
Small Quantity Baking

STUDENT NUMBER	1	2	3	4	5	6	7	8	9	16	24	25	26	27	28	29	TOTAL	N	MEAN
LAB ASSIGNMENT	A	A	B	A	A	A	A	A	A	A	B	B	B	B	B	B			
CRITERION 1																			
2	4	-	3	4	0	1	3	4	1	2	4	3	2	3	3	3	39	15	2.6
2	3	-	4	4	0	1	4	3	1	1	4	2	2	3	3	3	37	15	2.5
3	1	4	-	2	4	0	1	2	4	1	2	4	2	2	2	2	33	15	2.2
BISCUITS TOTAL	5	11	-	9	12	0	3	9	11	3	5	12	7	6	8	8	109	45	2.4
CRITERION 1																			
3	2	-	1	2	2	2	2	2	2	2	3	2	3	3	3	3	35	15	2.3
2	3	3	-	1	1	2	2	2	2	2	3	2	2	2	2	2	31	15	2.1
3	3	3	-	1	2	1	3	2	2	2	3	2	2	2	2	3	33	15	2.2
MUFFINS TOTAL	9	8	-	3	5	5	7	6	6	9	6	7	7	7	8	8	99	45	2.2
CRITERION 1																			
2	-	-	2	-	-	-	-	3	-	-	-	-	2	-	-	2	11	5	2.2
2	-	-	3	-	-	-	-	3	-	-	-	-	1	-	-	3	12	5	2.4
3	-	-	3	-	-	-	-	3	-	-	-	-	1	-	-	2	11	5	2.2
FRENCH TOAST TOTAL	6	-	-	8	-	-	-	9	-	-	-	-	4	-	-	7	34	15	2.3
CRITERION 1																			
2	-	4	-	-	2	1	2	-	3	2	3	2	-	2	3	-	24	10	2.4
2	-	3	-	-	2	1	3	-	3	2	3	2	-	2	2	-	23	10	2.3
3	-	4	-	-	3	1	2	-	3	3	3	2	-	2	3	-	26	10	2.6
OMELET TOTAL	-	11	-	-	7	3	7	-	9	7	9	6	-	6	8	-	73	30	2.4
CRITERION 1																			
4	2	-	4	4	2	3	3	3	3	3	4	4	4	3	3	3	48	15	3.2
2	3	1	-	4	4	3	2	2	4	4	2	3	3	4	3	4	46	15	3.1
3	4	2	-	4	4	3	3	2	4	3	3	4	4	4	4	4	52	15	3.5
CAKE TOTAL	11	5	-	12	12	8	8	7	11	10	8	11	11	11	10	11	146	45	3.2
CRITERION 1																			
4	0	-	3	4	2	4	3	4	4	4	2	4	3	4	3	3	47	15	3.1
2	4	0	-	2	4	2	3	2	3	2	2	3	2	4	3	3	39	15	2.6
3	3	0	-	2	4	2	3	2	3	2	3	4	2	4	2	3	39	15	2.6
FROSTING TOTAL	11	0	-	7	12	6	10	7	10	8	7	11	7	12	8	9	125	45	2.8
TOTAL																			
TOTAL	42	35	-	39	48	22	35	38	47	34	38	46	36	42	41	43	586		
CRITERION N																			
CRITERION N	15	15	-	15	15	15	15	15	15	15	15	15	15	15	15	15		225	
MEAN																			
MEAN	2.8	2.3	-	2.6	3.2	1.5	2.3	2.5	3.1	2.3	2.5	3.1	2.4	2.8	2.7	2.9		2.604	

SELF-PACED GROUP
Cycle 2--19 August

COMPLETION TASK RATINGS
Small Quantity Baking

STUDENT NUMBER	10	11	12	13	14	15	17	18	19	20	21	22	23	30	TOTAL	N	MEAN
LAB ASSIGNMENT	B	B	B	B	B	B	B	A	A	A	A	A	A	B			
Criterion 1	2	3	3	2	1	3	1	2	2	0	1	2	1	2	25	14	1.8
2	2	2	3	2	1	2	1	1	1	0	2	2	1	1	21	14	1.5
3	3	2	3	2	1	2	1	2	1	0	1	2	1	1	22	14	1.6
BISCUITS TOTAL	7	7	9	6	3	7	3	5	4	0	4	6	3	4	68	42	1.6
CRITERION 1	3	2	3	3	1	3	1	1	2	2	2	3	3	3	32	14	2.3
2	3	2	2	3	1	3	1	1	2	2	1	2	3	3	29	14	2.1
3	3	2	3	2	1	3	1	1	1	2	2	4	2	2	29	14	2.1
MUFFINS TOTAL	9	6	8	8	3	9	3	3	5	6	5	9	8	8	90	42	2.1
Criterion 1	2	3	4	-	2	1	-	2	3	-	3	3	2	3	28	11	2.5
2	2	2	4	-	1	1	-	2	2	-	4	2	2	3	25	11	2.3
3	2	2	4	-	2	1	-	3	3	-	3	2	2	3	27	11	2.4
FRENCH TOAST TOTAL	6	7	12	-	5	3	-	7	8	-	10	7	6	9	80	33	2.4
Criterion 1	-	-	-	2	3	-	2	-	2	-	-	-	-	-	9	4	2.3
2	-	-	-	3	2	-	2	-	-	3	-	-	-	-	10	4	2.5
3	-	-	-	2	3	-	2	-	-	2	-	-	-	-	9	4	2.3
OMELET TOTAL	-	-	-	7	8	-	6	-	-	7	-	-	-	-	28	12	2.3
Criterion 1	3	3	2	3	-	3	3	3	4	3	2	1	3	3	36	13	2.8
2	3	3	2	3	-	2	4	3	4	2	2	2	2	2	34	13	2.6
3	3	3	2	3	-	2	4	3	4	3	2	4	3	3	39	13	3.0
CAKE TOTAL	9	9	6	9	-	7	11	9	12	8	6	7	8	8	109	39	2.8
Criterion 1	2	2	3	3	-	3	3	2	4	3	2	3	2	2	34	13	2.6
2	2	3	2	2	-	3	4	2	4	2	2	2	2	2	32	13	2.5
3	2	2	2	2	-	3	4	2	4	2	2	2	2	2	31	13	2.4
FROSTING TOTAL	6	7	7	7	-	9	11	6	14	7	6	7	6	6	97	39	2.5
TOTAL	37	36	42	37	19	35	34	30	41	28	31	36	31	35	472		
CRITERION N	15	15	15	15	12	15	15	15	15	15	15	15	15	15	207		
MEAN	2.5	2.4	2.8	2.5	1.3	2.3	2.3	2.0	2.7	1.9	2.1	2.4	2.1	2.3	2.280		

ICI GROUP
Cycle 2--19 August
PROCEDURES RATINGS
Small Quantity Baking

STUDENT NUMBER	1	2	3	4	5	6	7	8	9	16	24	25	26	27	28	29	TOTAL	N	MEAN
LAB ASSIGNMENT	A	A	B	A	A	A	A	A	A	B	B	B	B	B	B	B			
Criterion 1	3	3	-	3	3	2	2	2	2	3	4	4	4	4	4	3	45	15	3.0
2	3	2	-	4	3	1	2	2	1	3	4	3	3	4	3	3	41	15	2.7
3	3	2	-	4	3	2	3	2	2	3	3	3	2	3	3	3	41	15	2.7
4	2	2	-	2	2	2	3	4	2	3	3	3	2	4	3	3	40	15	2.7
5	3	2	-	2	1	2	3	4	2	3	3	3	2	4	3	3	40	15	2.7
6	3	2	-	2	2	2	1	2	2	3	3	3	2	3	2	2	34	15	2.3
7	2	3	-	3	3	2	2	2	2	1	2	2	2	1	1	1	29	15	1.9
8	3	1	-	2	3	1	2	4	0	4	3	3	3	4	3	2	38	15	2.5
9	1	1	-	2	2	1	2	3	1	3	3	3	2	3	2	2	31	15	2.1
10	2	2	-	3	3	2	2	2	2	2	3	2	2	2	1	1	31	15	2.1
11	3	3	-	1	3	2	2	2	2	2	3	3	2	3	1	1	33	15	2.2
TOTAL	28	23	-	28	28	19	24	29	18	30	34	32	26	35	25	24	403		
CRITERION N	11	11	-	11	11	11	11	11	11	11	11	11	11	11	11	11		165	
MEAN	2.5	2.1	-	2.5	2.5	1.7	2.2	2.6	1.6	2.7	3.1	2.9	2.4	3.2	2.3	2.2			2.442

SELF-PACED GROUP

Cycle 2--19 August

PROCEDURES RATINGS

Small Quantity Baking

STUDENT NUMBER	10	11	12	13	14	15	17	18	19	20	21	22	23	30	TOTAL	N	MEAN
LAB ASSIGNMENT	B	B	B	B	B	B	B	A	A	A	A	A	A	B			
Criterion 1	4	4	4	3	3	3	3	3	3	3	2	2	2	3	42	14	3.0
2	3	3	3	3	3	3	3	2	3	1	1	3	1	3	35	14	2.5
3	2	2	3	3	3	3	3	3	3	3	2	3	1	3	37	14	2.6
4	3	2	3	3	3	3	4	3	3	3	2	3	2	3	40	14	2.9
5	3	3	3	3	3	3	4	2	2	2	2	3	2	3	38	14	2.7
6	2	3	3	1	1	1	2	2	3	1	2	3	1	3	28	14	2.0
7	2	2	3	1	1	1	2	2	2	1	2	2	2	1	24	14	1.7
8	2	3	3	1	3	2	1	3	3	2	2	3	4	3	35	14	2.5
9	2	3	3	1	1	1	2	3	3	1	2	3	3	3	31	14	2.2
10	2	3	3	1	2	1	2	1	2	2	2	2	2	2	27	14	1.9
11	3	3	3	1	2	1	2	3	1	2	2	3	2	2	30	14	2.1
TOTAL	28	31	34	21	25	22	28	27	28	21	21	30	22	29	367		
CRITERION N	11	11	11	11	11	11	11	11	11	11	11	11	11	11		154	
MEAN	2.5	2.8	3.1	1.9	2.3	2.0	2.5	2.5	2.5	1.9	1.9	2.7	2.0	2.6			2.383

ICI GROUP
Cycle 2--19 August
CONFIDENCE/ATTITUDE INDICATOR RATINGS
Small Quantity Baking

STUDENT NUMBER	-	1	2	3	4	5	6	7	8	9	16	24	25	26	27	28	29	TOTAL	N	MEAN
LAB ASSIGNMENT	-	A	A	B	A	A	A	A	A	A	B	B	B	B	B	B	B			
Criterion 1		2	3	-	2	2	2	3	4	1	3	4	4	3	3	3	3	42	15	2.8
2		2	2	-	3	3	2	3	3	3	4	3	3	3	3	3	3	43	15	2.8
3		1	2	-	3	4	3	3	4	3	4	3	3	2	3	4	-	45	16	3.0
4		3	2	-	2	4	2	2	4	2	3	3	3	3	3	3	3	42	15	2.8
5		3	3	-	3	3	2	3	3	2	3	4	3	3	3	3	1	42	15	2.8
TOTAL		11	12	-	13	16	11	14	18	11	17	17	16	14	15	16	13	214		
CRITERION N		5	5	-	5	5	5	5	5	5	5	5	5	5	5	5	5		75	
MEAN		2.2	2.4	-	2.6	3.2	2.2	2.8	3.6	2.2	3.4	3.4	3.2	2.8	3.0	3.2	2.6			2.853

SELF-PACED GROUP
Cycle 2--19 August
CONFIDENCE/ATTITUDE INDICATOR RATINGS
Small Quantity Baking

STUDENT NUMBER	10	11	12	13	14	15	17	18	19	20	21	22	23	30	
LAB ASSIGNMENT	B	B	B	B	B	B	B	A	A	A	A	A	A	B	TOTAL N MEAN
Criterion 1	4	2	4	3	3	3	3	3	3	2	2	3	2	3	40 14 2.9
2	3	2	4	3	3	3	3	2	3	3	2	3	2	4	40 14 2.9
3	2	2	3	3	3	3	3	2	3	3	3	2	3	4	39 14 2.8
4	3	3	4	3	2	2	2	2	3	2	2	3	2	3	36 14 2.6
5	3	3	4	1	1	1	2	3	3	2	2	3	3	4	35 14 2.5
TOTAL	15	12	19	13	12	12	13	12	15	12	11	14	12	18	190
CRITERION N	5	5	5	5	5	5	5	5	5	5	5	5	5	5	70
MEAN	3.0	2.4	3.8	2.6	2.4	2.4	2.6	2.4	3.0	2.4	2.2	2.8	2.4	3.6	2.714

ICI GROUP
Cycle 2--19 August
COOKING SKILLS RATINGS

STUDENT NUMBER	1	2	3	4	5	6	7	8	9	16	24	25	26	27	28	29	TOTAL	N	MEAN
LAB ASSIGNMENT	A	A	B	A	A	A	A	A	A	B	B	B	B	B	B	B			
Criterion 1	3	-	2	-	-	2	-	2	3	-	1	-	1	2	2	1	19	10	1.9
2	2	-	1	-	-	3	-	1	2	-	1	-	2	1	3	1	17	10	1.7
3	2	-	1	-	-	3	-	2	3	-	1	-	1	2	3	1	19	10	1.9
4	3	-	2	-	-	2	-	2	4	-	2	-	3	2	2	2	24	10	2.4
5	2	-	0	-	-	0	-	4	2	-	1	-	1	1	2	2	15	10	1.5
TOTAL	12	-	6	-	-	10	-	11	14	-	6	-	8	8	12	7	94		
CRITERION N	5	7	5	-	-	5	-	5	5	-	5	-	5	5	5	5		50	
MEAN	2.4	-	1.2	-	-	2.0	-	2.2	2.8	-	1.2	-	1.6	1.6	2.4	1.4			1.880

SELF-PACED GROUP
Cycle 2--19 August
COOKING SKILLS RATINGS

STUDENT NUMBER	10	11	12	13	14	15	17	18	19	20	21	22	23	30	TOTAL	N	MEAN
LAB ASSIGNMENT	B	B	B	B	B	B	B	A	A	A	A	A	A	B			
Criterion 1	-	2	2	4	2	2	2	2	3	2	2	2	2	-	27	12	2.3
2	-	2	2	4	2	1	3	1	2	2	2	2	-	2	25	12	2.1
3	-	3	3	4	0	1	3	2	2	3	2	2	-	2	27	12	2.3
4	-	3	4	3	2	1	1	1	2	2	1	2	-	1	23	12	1.9
5	-	2	4	2	2	2	3	1	0	2	2	2	-	0	22	12	1.8
TOTAL	-	12	15	17	8	7	12	7	9	11	9	10	-	7	124		
CRITERION N	-	5	5	5	5	5	5	5	5	5	5	5	-	5		60	
MEAN	-	2.4	3.0	3.4	1.6	1.4	2.4	1.4	1.8	2.8	1.8	2.0	-	1.4			2.067

ICI GROUP
Cycle 2--19 August
COMPLETION TASK RATINGS
Garrison Equipment

Student	1	2	3	4	5	6	7	8	9	16	24	25	26	27	28	29
Equipment	AH	DG	FC	F	AH	DG	BE	BE	AH	BC	BC	AH	DH	FC	BE	AH
1	33	23	22	3-	43	23	32	42	42	23	32	33	23	23	31	23
2	32	34	32	3-	43	13	32	42	43	23	32	33	23	23	32	33
3	33	24	22	3-	43	13	42	42	13	23	41	43	23	22	31	23
4	33	34	22	3-	43	23	42	42	42	23	31	42	23	22	32	33
5	33	22	22	3-	42	22	43	42	43	22	41	33	22	31	32	22
6	22	31	32	2-	42	22	43	42	43	22	41	23	22	31	32	22
7	33	33	32	3-	43	22	42	41	23	22	41	32	23	21	32	33
8	33	32	32	3-	43	22	43	42	42	22	41	32	23	22	22	33
9	33	32	22	3-	43	22	33	42	42	22	41	32	22	22	22	33
10	33	32	32	3-	42	12	33	41	43	22	40	33	13	32	12	32
11	33	33	32	3-	42	12	43	41	43	22	40	33	13	22	12	33
12	22	32	22	4-	33	21	42	41	33	21	31	23	13	21	22	33
13	23	22	32	3-	33	21	43	41	43	21	31	23	13	31	21	32
14	33	21	32	3-	43	23	43	41	43	22	41	32	13	22	21	22
15	33	22	32	3-	42	23	43	41	43	22	41	33	13	22	22	21
TOTAL	42	38	37	45	58	46	34	60	54	32	55	44	24	36	26	38
MEAN	2.8	2.5	2.5	3.0	3.9	2.7	3.7	4.0	3.6	2.0	3.7	2.9	1.6	2.3	1.7	2.6
PERCENT OF POSSIBLE	70.0	61.7	65.0	75.0	96.7	56.7	93.3	100.0	90.0	50.0	91.7	73.3	40.0	56.7	43.3	65.0
TOTAL	84	75	69	45	98	60	95	83	95	62	70	84	66	61	61	77
MEAN	2.8	2.5	2.3	3.0	3.3	2.0	3.2	2.8	3.2	2.1	2.3	2.8	2.2	2.0	2.0	2.6
PERCENT	70.0	62.5	57.5	75.0	81.7	50.0	79.2	69.2	79.2	51.7	58.3	70.0	55.0	50.8	50.8	64.2

EQUIPMENT KEY

A = Milk Dispenser E = Deep Fat Fryer
 B = Hobart Mixer F = Convection Oven
 C = Coffee Urn G = Ice Cream Machine
 D = Meat Slicer H = Gas Griddle

ICI GROUP SUMMARY RATINGS

Total 1185
 Mean 2.548
 Percent of Possible 63.7

SELF-PACED GROUP
Cycle 2--19 August

COMPLETION TASK RATINGS
Garrison Equipment

Student	10	11	12	13	14	15	17	18	19	20	21	22	23	30
Equipment	FG	AG	BE	AH	DG	FC	AH	DG	FC	BE	DH	B	FC	FG
1	22	13	11	23	12	31	22	11	22	20	12	2-	21	23
2	22	13	11	33	12	31	22	21	22	20	12	2-	21	23
3	12	23	01	33	12	21	32	11	12	20	22	3-	21	23
4	22	22	01	33	11	21	33	21	22	20	23	3-	21	13
5	12	11	21	22	11	20	23	20	21	20	12	2-	10	21
6	22	12	21	12	01	20	22	10	11	20	13	2-	20	21
7	12	12	21	23	11	20	23	10	11	11	12	2-	10	21
8	11	11	21	13	11	20	13	20	21	20	12	2-	20	11
9	21	21	21	13	11	21	22	20	21	20	13	2-	20	21
10	21	12	21	33	11	21	12	11	21	20	13	2-	11	31
11	21	22	21	33	11	20	22	01	21	20	13	3-	20	31
12	21	22	21	32	10	20	23	10	11	10	23	3-	20	21
13	21	22	11	32	11	20	23	10	20	10	12	2-	30	21
14	11	11	21	23	10	21	23	20	21	20	22	2-	31	21
15	21	11	21	33	10	21	22	20	21	20	23	2-	21	21
TOTAL	25	21	23	35	41	32	30	21	26	27	20	34	29	23
MEAN	1.7	1.4	1.5	2.3	1.0	2.1	2.0	0.4	1.7	1.8	1.3	2.3	1.9	1.5
PERCENT OF POSSIBLE	41.7	35.0	38.3	58.3	25.0	53.3	50.0	10.0	43.3	45.0	33.3	56.7	48.3	38.3
TOTAL	47	49	38	76	29	40	67	27	44	28	57	34	36	53
MEAN	1.6	1.6	1.3	2.5	1.0	1.3	2.2	0.9	1.5	0.9	1.9	2.3	1.2	1.8
PERCENT	39.2	40.8	31.6	63.3	24.2	33.3	55.8	22.5	36.7	23.3	47.5	56.7	30.0	44.2

EQUIPMENT KEY

A = Milk Dispenser
B = Hobart Mixer
C = Coffee Urn
D = Meat Slicer
E = Deep Fat Fryer
F = Convection Oven
G = Ice Cream Machine
H = Gas Griddle

SELF-PACED GROUP SUMMARY RATINGS

Total 625
Mean 1.543
Percent of Possible 38.6

SELF-PACED GROUP
Cycle 2--19 August
Garrison Equipment
Composite Ratings on Equipment

Student	Milk Dispenser	Mixing Machine	Coffee Urn	Meat Slicer	Deep Fat Fryer	Convection Oven	Ice Cream Machine	Gas Griddle
10	-	-	-	-	-	25	22	-
11	22	-	-	-	-	-	28	-
12	-	23	-	15	-	-	-	-
13	35	-	-	-	-	-	-	41
14	-	-	-	14	-	-	15	-
15	-	-	8	-	-	32	-	-
17	30	-	-	-	-	-	-	37
18	-	-	-	21	-	-	6	-
19	-	-	18	-	-	26	-	-
20	-	27	-	-	1	-	-	-
21	-	-	-	20	-	-	-	37
22	-	34	-	-	-	-	-	-
23	-	-	7	-	-	29	-	-
30	-	-	-	-	-	30	23	-

86	84	33	55	16	142	94	115
45	45	45	45	30	75	75	45
1.9	1.9	0.7	1.2	0.5	1.9	1.3	2.6
47.8	46.7	18.3	30.6	13.3	47.3	31.3	63.9

ICI GROUP
Cycle 2--19 August
Garrison Equipment
Composite Ratings on Equipment

Student	Milk Dispenser	Mixing Machine	Coffee Urn	Meat Slicer	Deep Fat Fryer	Convection Oven	Ice Cream Machine	Gas Griddle
1	42	-	-	-	-	-	-	42
2	-	-	-	38	-	-	37	-
3	-	-	30	4	-	39	-	-
4	-	-	-	-	-	45	-	-
5	58	-	-	-	-	-	-	40
6	-	-	-	26	-	-	34	-
7	-	56	-	39	-	-	-	-
8	-	60	-	23	-	-	-	-
9	34	-	-	-	-	-	-	41
16	-	30	32	-	-	-	-	-
24	-	55	15	-	-	-	-	-
25	44	-	-	-	-	-	-	40
26	-	-	-	24	-	-	-	42
27	-	-	27	-	-	34	-	-
28	-	35	-	-	26	-	-	-
29	39	-	-	-	-	-	-	38

TOTAL	237	236	104	88	88	118	71	243
CRITERION W	75	75	60	45	45	45	50	90
MEAN	3.2	3.1	1.7	2.0	2.0	2.6	2.4	2.7
PERCENT OF POSSIBLE	79.0	78.7	43.3	48.9	48.9	65.6	59.2	67.5

ICI GROUP
Cycle 2--19 August
Garrison Equipment
Composite Ratings on Criteria

Student	Check Equipment	Safety Precautions	Start-Operate Equipment	Stop Equipment	Disassemble Equipment	Clean Equipment	Reassemble Equipment
1	11	12	16	12	12	9	12
2	11	13	14	10	11	9	7
3	9	8	14	9	10	9	10
4	6	6	8	6	6	7	6
5	14	14	19	14	12	12	12
6	9	9	12	8	6	6	10
7	10	12	20	13	13	13	14
8	12	12	17	12	10	10	10
9	13	10	19	12	14	13	14
16	10	10	12	8	8	6	8
24	10	9	15	10	8	8	10
25	12	13	16	10	12	10	11
26	10	10	13	9	8	8	8
27	10	8	11	8	9	7	8
28	9	9	15	8	6	7	7
29	11	11	14	12	11	11	7
TOTAL	167	166	235	161	156	145	155
CRITERION N	62	62	93	62	62	62	62
MEAN	2.7	2.7	2.5	2.6	2.5	2.3	2.5
PERCENT OF POSSIBLE	67.3	66.9	63.2	64.9	62.9	58.5	62.5

SELF-PACED GROUP
Cycle 2--19 August
Garrison Equipment
Composite Ratings on Criteria

Student	Check Equipment	Safety Precautions	Start-Operate Equipment	Stop Equipment	Disassemble Equipment	Clean Equipment	Reassemble Equipment
10	8	7	10	5	6	6	5
11	8	9	8	5	7	8	4
12	4	2	9	6	6	5	6
13	11	12	12	8	12	10	11
14	6	5	5	4	4	3	2
15	8	6	6	5	5	4	6
17	8	11	14	8	7	10	9
18	5	5	4	4	3	2	4
19	8	7	7	6	6	4	6
20	4	4	6	4	4	2	4
21	6	9	10	7	8	8	9
22	4	6	6	4	5	5	4
23	6	6	4	4	4	5	7
30	10	9	9	5	8	6	6
96	98	110	75	85	78	83	
54	54	81	54	54	54	54	54
1.8	1.8	1.4	1.4	1.4	1.6	1.4	1.5
44.4	45.4	34.0	34.7	39.4	36.1	38.4	

RECIPE CONVERSION SCORES

ICI GROUP
Cycle 2--19 August

Student	Items Correct	Percent
1	4	21.1
2	10	52.6
3	14	73.7
4	0	0.0
5	1	5.3
6	14	73.7
7	3	15.8
8	0	0.0
9	17	89.5
16	2	10.5
24	8	42.1
25	0	0.0
26	1	5.3
27	8	42.1
28	17	89.5
29	12	63.2

STUDENTS N 16

GROUP TOTAL 111

PERCENT OF POSSIBLE 36.5

SELF-PACED GROUP
Cycle 2--19 August

Student	Items Correct	Percent
10	6	31.6
11	6	31.6
12	8	42.1
13	3	15.8
14	0	0.0
15	8	42.1
17	7	36.8
18	7	36.8
19	5	26.3
20	1	5.3
21	12	63.2
22	15	78.9
23	13	68.4
30	12	63.2

14

103

38.7

Maximum possible score = 19 items correct

CYCLE 2 RATINGS

Reaction Surveys

ICI AND SELF-PACED GROUPS

Cycle 2--19 August

REACTION SURVEY
Task Competencies

TASK COMPETENCY	ICI GROUP			SELF-PACED GROUP		
	N	TOTAL	MEAN	N	TOTAL	MEAN
1. Read and follow recipe cards.	10	27	2.7	13	31	2.4
2. Prepare food for proper: taste and flavor	10	26	2.6	12	32	2.7
consistency and texture	10	24	2.4	12	30	2.5
appearance	10	24	2.4	12	30	2.5
garnish	10	23	2.3	12	28	2.3
3. Prepare and maintain work area.	12	32	2.7	13	35	2.7
4. Use sanitation and safety procedures.	12	34	2.8	13	35	2.7
5. Use "clean as you go" procedures.	12	34	2.8	13	32	2.5
6. Prepare food items without waste.	12	29	2.4	13	33	2.5
7. Use a knife properly to:						
slice	11	29	2.6	12	33	2.8
shred	11	26	2.4	12	28	2.3
cube	11	28	2.5	12	31	2.6
dice	11	29	2.6	12	32	2.7
chop	11	30	2.7	12	32	2.7
mince	11	28	2.5	12	24	2.0
8. Use procedures to: weigh dry ingredients	12	32	2.7	12	33	2.8
measure liquid ingredients	11	30	2.7	12	33	2.8
9. Use proper procedures for:						
soups	12	31	2.6	12	34	2.8
salads	12	34	2.8	12	33	2.8
basic sauces	10	26	2.6	12	28	2.3
10. Prepare bakery items:						
quick breads	11	31	2.8	12	31	2.6
cookies	12	34	2.8	12	34	2.8
cakes	12	33	2.8	12	31	2.6
rolls	11	32	2.9	12	33	2.8
pies	12	22	2.8	12	31	2.6
11. Prepare meat & other items by:						
baking	12	31	2.6	12	32	2.7
roasting	11	29	2.9	12	37	2.3
frying	12	31	2.6	12	31	2.6
braising	11	23	2.1	12	29	2.4
stewing or boiling	11	26	2.4	12	26	2.2
12. Start, operate, and maintain:						
mixer	12	32	2.7	12	33	2.8
slicer	12	28	2.3	12	27	2.3
coffee urn	12	29	2.4	12	20	1.7
milk dispenser	12	31	2.6	12	33	2.8
oven	12	30	2.5	12	25	2.1
deep fat fryer	12	30	2.5	12	29	2.4
13. Explain purpose and function of:						
mixer	12	29	2.4	12	28	2.3
slicer	12	26	2.2	12	21	1.8
coffee urn	12	27	2.3	12	18	1.5
milk dispenser	12	29	2.4	12	26	2.2
oven	12	26	2.2	12	20	1.7
deep fat fryer	12	28	2.3	12	21	1.8
14. Convert recipes.	11	24	2.2	12	27	2.3
15. Ask proper questions about preparing food.	11	30	2.7	12	35	2.9
16. Ask proper questions to operate equipment	11	30	2.7	12	37	3.1
GROUP TOTALS	513	1308	2.549	545	1332	2.444

ICI AND SELF-PACED GROUPS
Cycle 2---19 August

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REACTION SURVEY
The Training Program

ASPECTS OF THE TRAINING PROGRAM	ICI GROUP			SELF-PACED GROUP		
	N	TOTAL	MEAN	N	TOTAL	MEAN
1. Before each lesson, I was told what I was going to learn and why I need to learn it.	15	54	3.6	12	38	3.2
2. My instructor demonstrated each thing I was to learn. (*)	15	55	3.7(*)	12	31	2.6(*)
3. My instructor made sure I understood what to do before I actually did it.	15	54	3.6	12	38	3.2
4. I was told not only what I needed to correct but also what I was doing right.	15	47	3.1	12	37	3.1
5. My instructor had me learn the reasons for doing things in a particular way.	15	50	3.3	12	32	2.7
6. I was asked to explain what I was learning. (*)	15	48	3.2(*)	12	39	3.3(*)
7. During class, I was encouraged to share my ideas with other students. (*)	15	46	3.1(*)	12	26	2.2(*)
8. I was treated with respect by my instructor.	15	52	3.5	12	41	3.4
9. Time was wasted doing nothing or doing things that did not help me learn. (e)	15	16	1.1(e)	12	22	1.8(e)
10. My instructor took the time to help me understand without "putting me down".	15	53	3.5	12	39	3.3
11. I was able to read and understand the written material I was given.	15	50	3.3	12	39	3.3
12. The instruction was too fast for me to follow what was going on.	15	18	1.2	12	24	2.0
13. The instruction was too slow and I got bored.	15	29	1.9	12	7	0.6
UNADJUSTED TOTALS	195	600	3.076	156	418	2.679
(*) ADJUSTED TOTALS	150	451	3.006	120	322	2.683

NOTES:

- (*) Statements apply only to ICI training. Ratings not counted in adjusted total.
(e) Ratings inverted for group totals because of the way the statement is worded.

FILMED
7-8